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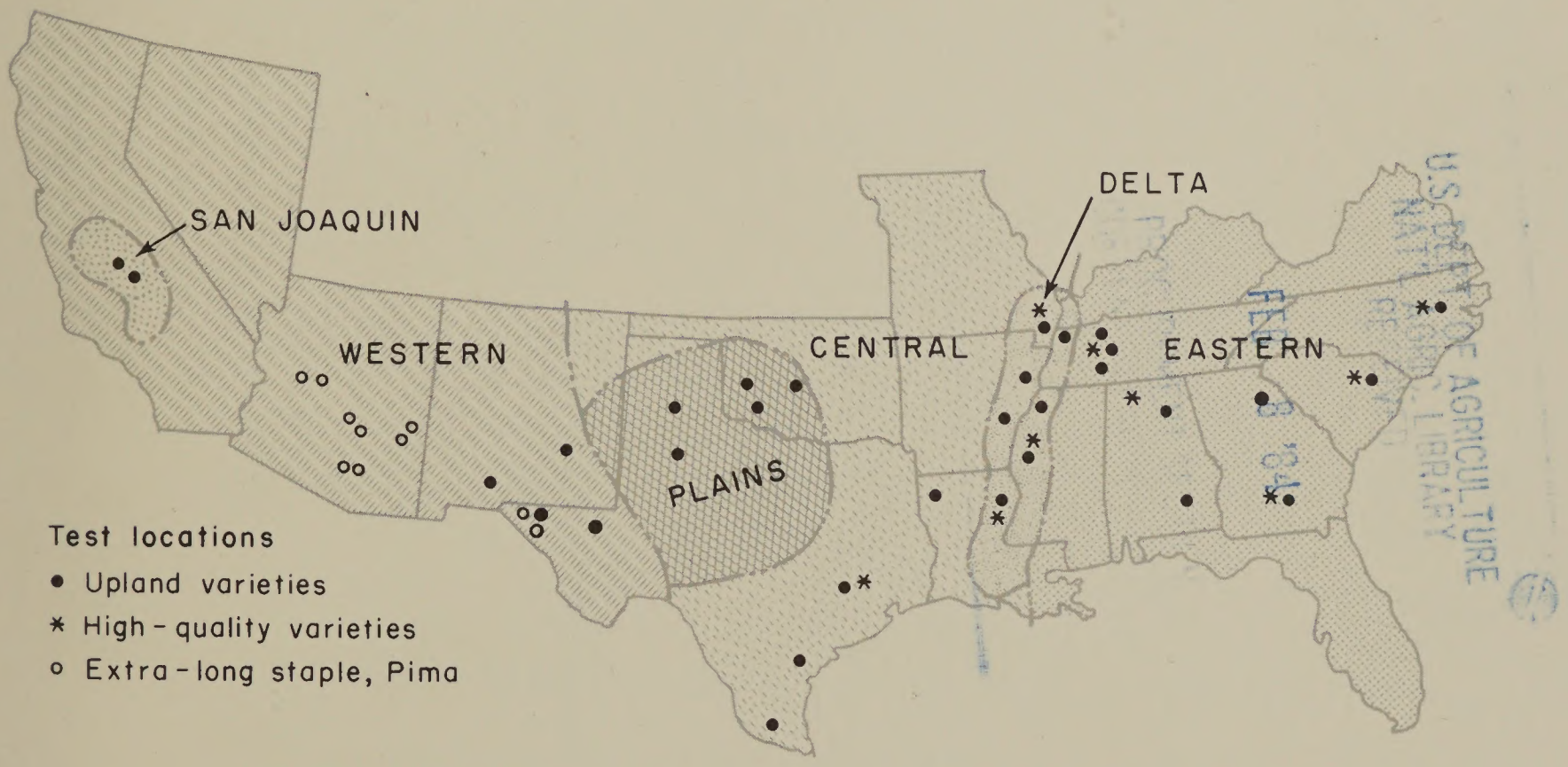
Yield, Boll, Seed, Spinning, and Fiber Data



Agricultural Research Service
U.S. Department of Agriculture

REGIONAL COTTON VARIETY TESTS, 1980

Yield, Boll, Seed, Spinning, and Fiber Data

Compiled by H. H. Ramey, Jr., research geneticist, J. C. Donnelly, statistical assistant, and M. K. Barringer, physical science technician, Cotton Quality Research Unit, Southern Regional Research Center; Victor Chew, biometrician, Biometrical Services Staff, Agricultural Research Service; and S. M. Buco, assistant professor, Department of Experimental Statistics, Louisiana State University, in cooperation with the agricultural experiment stations of Alabama, Arizona, Arkansas, California, Georgia, Louisiana, Mississippi, Missouri, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, and Texas

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The Regional Cotton Variety Test series is available free of charge from the Cotton Quality Research Unit, Southern Regional Research Center, P.O. Box 19687, New Orleans, La. 70179.

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INTRODUCTION

The National Cotton Variety Testing Program, developed from recommendations of the Joint Cotton Breeding Policy Committee, is a system for uniform reporting of data from cotton-yield trials across the U.S. Cotton Belt. The trials are conducted annually at selected locations involved in the variety-testing programs of the cooperating State agricultural experiment stations. The National Cotton Variety Testing Committee is responsible for coordinating program plans from year to year.

National standard varieties are chosen for a 3-year cycle of testing. For the seventh 3-year cycle of testing, which began in 1978, the national standards were Acala SJ-5, Coker 310, Paymaster 303, and Stoneville 213. Within each region, cooperators annually select a group of regional standard varieties that are common to all tests within the region for the particular year. Each station may add entries of local interest, but only data on the national and regional standards are included in this report. All varieties are grown to obtain experimental data, and the designation of national and regional standards is not an endorsement of these varieties by the U.S. Department of Agriculture or the cooperating State agricultural experiment stations.

Plot size, cultural practices, number of entries, and sampling methods are left to the discretion of the participating stations. While these details are not rigidly standardized, all tests are conducted by experienced personnel using sound experimental designs and procedures.

Yield, boll size, lint percentage, and seed index were supplied by the cooperating stations. Fiber and yarn tests were made at USDA's Cotton Laboratory at Clemson, S.C. Seed were analyzed at USDA's Cotton Quality Research Unit, New Orleans, except for the chemical analyses, which were done by a private laboratory. Yield, boll size, and seed index were not received from certain locations. Fiber samples were not received from three locations. Seed samples were not obtained from several locations, and seed samples from some locations were too small for all determinations. All data were assembled in the Cotton Quality Research Unit. The yield and boll data were analyzed at the University of Florida computer center, and the seed, fiber, and yarn data, at Louisiana State University computer center.

In 1980 the National Cotton Variety Testing Program was organized as shown on the cover map. Upland varieties were grown in all six regions. Strains developed in the Southern States with superior fiber properties and spinning performance were tested in three contiguous regions (high-quality test). Extra-long-staple American Pima varieties were tested in the Western Region.

REGIONAL TESTS AND PARTICIPATING STATIONS

Eastern Regional Cotton Variety Test (Upland Varieties)

Alabama Agricultural Experiment Station	Auburn, Ala.
Sand Mountain Substation	Crossville, Ala.
Georgia Coastal Plain Experiment Station	Tifton, Ga.
Georgia College Experiment Station	Athens, Ga.
Pee Dee Experiment Station	Florence, S.C.
Upper Coastal Plain Experiment Station	Rocky Mount, N.C.
West Tennessee Agricultural Experiment Station	Jackson, Tenn.
Ames Plantation	Grand Junction, Tenn.
Milan Field Station	Milan, Tenn.

Delta Regional Cotton Variety Test (Upland Varieties)

Arkansas Agricultural Experiment Station:	
Cotton Branch	Marianna, Ark.
Delta Substation	Clarkedale, Ark.
Mississippi Agricultural and Forestry Experiment Station:	
Delta Branch	Stoneville, Miss.
Off-station test	Tunica, Miss.
Missouri Agricultural Experiment Station, Delta Center	Portageville, Mo.
Northeast Louisiana Experiment Station	St. Joseph, La.
West Tennessee Agricultural Experiment Station, off-station test	Ridgely, Tenn.

Central Regional Cotton Variety Test (Upland Varieties)

Red River Valley Experiment Station	Bossier City, La.
Texas A&M University:	
Agricultural Research and Extension Center	Weslaco, Tex.
Agricultural Research Station, off-station test	Nueces County, Tex.
Texas Agricultural Experiment Station	College Station, Tex.

Plains Regional Cotton Variety Test (Upland Varieties)

Oklahoma Agricultural Experiment Station:	
Cotton Research Station	Chickasha, Okla.
Irrigation Experiment Station	Altus, Okla.
Sandy Land Research Station	Mangum, Okla.
Texas A&M University Agricultural Research and Extension Center	Lubbock, Tex.
Off-station test	Lamesa, Tex.

Western Regional Cotton Variety Test (Upland Varieties)

New Mexico Agricultural Experiment Station	Las Cruces, N. Mex.
Southeastern Branch Station	Artesia, N. Mex.
Texas A&M University:	
Agricultural Research Center	El Paso, Tex.
Agricultural Research Station	Pecos, Tex.

San Joaquin Valley Continuous Cotton Variety Test (Upland Varieties)

California Agricultural Experiment Station:	
West Side Field Station	Five Points, Calif.
Off-station test	Maricopa, Calif.

High-Quality Regional Cotton Variety Test

Alabama Agricultural Experiment Station, Tennessee Valley Substation	Belle Mina, Ala.
Georgia Coastal Plain Experiment Station	Tifton, Ga.
Mississippi Agricultural and Forestry Experiment Station, Delta Branch	Stoneville, Miss.

Missouri Agricultural Experiment Station, Delta Center	Portageville, Mo.
Northeast Louisiana Experiment Station	St. Joseph, La.
Pee Dee Experiment Station	Florence, S.C.
Texas Agricultural Experiment Station	College Station, Tex.
Upper Coastal Plain Experiment Station	Rocky Mount, N.C.
West Tennessee Agricultural Experiment Station	Jackson, Tenn.

Pima Regional Cotton Variety Test

Arizona Agricultural Experiment Station:	
Cotton Research Center	Phoenix, Ariz.
Off-station tests:	Coolidge, Ariz.
	Salome, Ariz.
	Wenden, Ariz.
Marana Experimental Farm	Marana, Ariz.
Off-station tests, Clark farm	Marana, Ariz.
Safford Branch Station, off-station tests:	
Curtis farm	Safford, Ariz.
Layton farm	Safford, Ariz.
Texas A&M University:	
Agricultural Research Center	El Paso, Tex.
Off-station test, Maros farm	Fabens, Tex.

Combed-Yarn Test (American Pima Varieties)

American Pima cottons are commonly spun into combed yarns. In addition to the carded yarn tenacity, combed-yarn tests of Pima cotton grown at three locations conducting the Pima Regional Cotton Variety Test were made by the Agricultural Marketing Service, U.S. Department of Agriculture, at its Clemson, S.C., laboratory. Classer's grade and staple, yarn tenacity of 11.8- and 7.4-tex (50's and 80's cotton count) yarns, appearance index, imperfections per 1,000 yards, and waste percentages are reported.

TEST RESULTS

No interpretation of the test results other than the indication of the significant differences among means based on an analysis of variance is presented. Means followed by the same letter or letters cannot be considered significantly different at the 0.05 level of probability, as determined by Duncan's multiple-range test. A randomized-block design was used for all analyses, although some tests were planted in lattice designs.

The yield reported for each variety is the average derived from the number of replications used. From three to eight replications were planted, depending on the station, and six replications were more commonly used. Boll size, lint percentage, and seed, fiber, and yarn data are based on two replications of each variety at all locations.

The tables for each regional test are arranged as follows: In the first four to six tables, average data for the entire region are given by cotton variety and location; the entries in these tables are arranged in order of decreasing lint yield. (For some tests, subregional summaries are also included.) Following these tables average data for each location in the region are given, each table being arranged by variety in decreasing order of lint yield.

The column headings and symbols are defined as follows:

Acid-delinted-seed index. The mass of

100 acid-delinted seeds, in grams.

Boll size. The mass, in grams, per boll of seed cotton.

Classer's designation. A description of the quality of cotton in terms of grade and staple according to the official cotton standards of the United States. For grade, classification is based on appearance and is accomplished chiefly through the sense of sight by integration of the three factors of grade--color, leaf, and preparation--in the sample. Classification for staple length involves both sight and touch and is made by pulling out and comparing a typical portion of fiber from a sample with the official staple types.

Colorimeter. These measurements were determined by the Motion Control Cotton Colorimeter. Hunter's *b* value is a measure of increasing yellowness of the cotton. R_d is the percentage of the reflectance; the higher the value, the lighter the cotton.

Digital Fibrograph. An instrument for measuring fiber length. S.L. (span length) is the distance spanned by a specified percentage of the fibers in the test specimen, where the initial starting point of the scanning in the test is considered 100 percent. The 2.5-percent S.L. is the length, in inches, on the test specimen spanned by 2.5 percent of the fibers scanned at the initial starting point. The 2.5-percent S.L. approximates classer's staple. The 50-percent S.L. is the length, in inches, on the test specimen spanned by 50 percent of the fibers scanned at the initial starting point.

Floaters. The number of acid-delinted seeds that float in water, expressed as a percentage of the number of seeds in the sample. Seeds that float in water are considered immature, and a higher percentage indicates more immaturity.

Free gossypol. The gossypol in fuzzy seeds as determined by AOCS Method Ba 7-58; expressed as a percentage of the mass of the kernel.

High Volume Instrument. An instrument system used to measure length and strength of cotton fibers. The UHM (upper-half mean) is the average length, in inches, of the half of the fibers, by weight, that contains the longer fibers. Uniformity is the ratio of the mean length to UHM, expressed as a percentage. Tenacity is the fiber strength of a bundle of fibers measured with the two jaws holding the fiber bundle separated by one-eighth inch, expressed in grams force per tex.

Linters. The mass of linters removed in the acid-delinting process, expressed as a percentage of the mass of the fuzzy seeds.

Lint percent. The mass of lint ginned from a sample of seed cotton, expressed as a percentage of the mass of seed cotton.

Lint yield. The mean production of the plots harvested, expressed in pounds of lint per acre.

Micronaire. The fineness of the sample taken from the ginned lint, measured by the Micronaire and expressed in standard (curvilinear scale) micronaire units.

Nitrogen. The nitrogen in fuzzy seeds as determined by AOCS Method Ba 4-38; expressed as a percentage of the mass of the fuzzy seeds. The percentage of nitrogen multiplied by 6.25 is an approximation of the percentage of protein.

Oil. The oil in fuzzy seeds as determined by AOCS Method Aa 4-38; expressed as a percentage of the mass of the fuzzy seeds.

Seed density. The mass per volume of a seed, expressed in grams per cubic centimetre; the specific gravity.

Seed grade. A visual estimate of the amount of linters on seeds. Seeds are graded from 1 to 16; 1=most dense coating, and 16=no linters (completely naked).

Seed index. The mass of 100 fuzzy seeds, in grams.

Seed surface area. The surface area of a seed, in square millimetres; estimated by assuming that a seed is a cone on a

hemispherical base and that the ratio of the diameter to the length is 1:1.755.

Seed volume. The volume of a seed, in cubic millimetres.

Stelometer. An instrument for measuring fiber strength. T_1 is the fiber strength of a bundle of fibers measured on the Stelometer with two jaws holding the fiber bundle separated by a 1/8-inch spacer, expressed in millinewtons (mN) per tex. E_1 is the percentage elongation at break of the center one-eighth inch of the fiber bundle measured for T_1 strength on the Stelometer.

Tex. The linear density of fibers, filaments, and yarns, expressed as the mass, in milligrams, of 1 metre of fiber or yarn.

Waste. The difference in mass, expressed as a percentage, of the fed stock and delivered stock. Picker and card waste is the loss in mass during opening, picking, and carding. Comber waste is the loss in mass during combing.

Yarn appearance index. The relative evenness, smoothness, and freedom from foreign material of the yarn as evaluated by a visual comparison of the yarn with the standards adopted by the American Society for Testing and Materials. Higher numbers indicate more even and smooth yarns with less foreign material.

Yarn imperfections. The abrupt changes in thickness of a yarn detected by two capacitor plates, expressed as the number of such changes per 1,000 yards of yarn; may be called neps.

Yarn tenacity. The strength of the yarn, in millinewtons per tex (mN/tex).

Table 1. Eastern test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	714 a	4.94 de	38.7 d	10.3 c	138 e
McNair 235	708 a	4.79 efg	39.6 bc	9.8 d	145 cd
McNair 220	701 ab	4.84 ef	38.7 d	10.4 c	150 c
Stoneville 506	669 bc	4.53 h	38.1 ef	10.6 bc	138 e
Deltapine 61	652 cd	4.97 de	37.7 fg	10.7 bc	146 cd
Coker 315	649 cd	5.12 bcd	39.3 c	10.6 bc	151 c
Deltapine 55	642 cd	4.69 fgh	40.1 b	9.8 d	143 de
Coker 8304	637 cd	5.09 cd	38.6 de	10.6 bc	149 cd
Coker 310	631 cd	5.32 ab	38.3 de	10.6 bc	150 c
Deltapine 41	626 d	4.47 h	41.0 a	9.6 d	151 c
Coker 420	620 d	4.69 fgh	36.9 h	10.4 bc	158 b
Paymaster 303	564 e	5.45 a	37.5 g	10.9 ab	131 f
Ga Cot 79	547 ef	4.59 gh	35.9 i	10.3 c	151 c
Acala SJ-5	513 f	5.22 bc	37.5 fg	11.4 a	182 a

Table 2. Eastern test: Fiber data by cotton variety

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 213	1.07 efg	0.50 def	190 ef	6.3 b	4.94 ab
McNair 235	1.07 fg	.50 ef	196 de	5.3 f	4.64 cd
McNair 220	1.06 g	.49 ef	200 bcde	5.3 f	4.67 cd
Stoneville 506	1.08 def	.50 cdef	191 def	6.0 bc	4.81 bc
Deltapine 61	1.10 cde	.52 bc	201 bcd	7.0 a	5.08 a
Coker 315	1.10 bcd	.51 cde	199 cde	5.6 def	4.77 bc
Deltapine 55	1.08 defg	.49 f	185 fg	5.7 cde	4.61 cde
Coker 8304	1.10 cd	.51 cde	197 de	5.4 ef	4.71 cd
Coker 310	1.11 abc	.52 bcd	197 de	5.6 def	4.56 de
Deltapine 41	1.08 def	.50 cdef	196 de	5.6 def	4.81 bc
Coker 420	1.12 a	.54 ab	210 b	5.9 cd	4.64 cd
Paymaster 303	1.01 h	.47 g	176 g	5.4 ef	4.44 ef
Ga Cot 79	1.08 def	.51 cdef	208 bc	6.8 a	4.71 cd
Acala SJ-5	1.12 ab	.55 a	244 a	5.7 cde	4.32 f

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Stoneville 213	1.10 bcd	82.8 def	24.0 bcde	68.2 a	11.2 ab
McNair 235	1.09 cd	82.9 cde	23.1 efg	67.4 a	10.8 bcd
McNair 220	1.09 d	83.1 cde	23.6 bcdef	69.1 a	10.8 bcd
Stoneville 506	1.11 bcd	82.8 def	23.6 cdef	68.9 a	10.3 d
Deltapine 61	1.12 bcd	83.8 abc	24.4 bcd	68.5 a	10.7 bcd
Coker 315	1.13 abc	82.7 def	24.5 bc	68.5 a	11.1 abc
Deltapine 55	1.10 bcd	82.1 ef	22.6 fg	69.9 a	11.0 abc
Coker 8304	1.12 bcd	83.1 cd	23.1 defg	67.4 a	10.8 bcd
Coker 310	1.12 bcd	82.6 def	24.0 bcde	67.9 a	10.7 bcd
Deltapine 41	1.10 bcd	83.4 bcd	23.6 bcdef	70.0 a	11.4 a
Coker 420	1.16 a	84.2 ab	24.9 b	70.0 a	10.6 cd
Paymaster 303	1.02 e	81.8 f	22.1 g	68.9 a	11.1 abc
Ga Cot 79	1.09 cd	83.1 cde	24.6 bc	69.3 a	10.7 bcd
Acala SJ-5	1.13 ab	84.5 a	28.9 a	69.7 a	11.0 abc

Table 3. Eastern test: Seed data by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 213	16.1 e	3.49 d	0.60 bcd	13.4 a	4.0 f
McNair 235	18.1 b	3.60 c	.61 bcd	11.2 cd	5.2 ab
McNair 220	18.0 b	3.60 c	.58 bcd	10.7 cde	5.1 abc
Stoneville 506	17.3 c	3.57 c	.55 cde	11.5 bcd	5.0 bcd
Deltapine 61	18.2 b	3.53 cd	.60 bcd	10.7 cde	5.5 a
Coker 315	18.2 b	3.67 b	.64 b	11.3 cd	4.6 e
Deltapine 55	16.8 d	3.58 c	.61 bcd	10.1 de	5.3 ab
Coker 8304	18.3 b	3.69 b	.62 bc	11.3 cd	4.8 cde
Coker 310	18.1 b	3.68 b	.64 b	11.3 cd	4.5 e
Deltapine 41	16.8 d	3.66 b	.60 bcd	9.3 e	5.1 bcd
Coker 420	18.9 a	3.70 ab	.86 a	12.9 ab	3.8 f
Paymaster 303	18.3 b	3.59 c	.56 cde	11.9 bc	4.7 de
Ga Cot 79	17.3 c	3.42 e	.55 de	10.9 cd	5.5 a
Acala SJ-5	18.4 b	3.75 a	.51 e	10.1 de	3.9 f

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Stoneville 213	94.2 cd	108.5 cd	0.962 g	3.0 ab	8.8 cd
McNair 235	90.5 ef	106.2 def	.984 def	2.9 abc	8.9 cd
McNair 220	94.3 cd	108.6 cd	.973 fg	2.0 bc	9.1 bcd
Stoneville 506	95.9 c	109.7 c	.972 fg	3.5 a	9.2 bcd
Deltapine 61	93.7 cde	108.1 cde	.991 cd	2.3 abc	9.3 bcd
Coker 315	93.0 cdef	107.5 cdef	1.017 ab	2.3 bc	9.4 bcd
Deltapine 55	90.8 ef	105.7 ef	.972 fg	2.0 bc	8.8 d
Coker 8304	93.3 cde	107.8 cdef	1.015 b	2.1 bc	9.4 bcd
Coker 310	94.9 cd	109.0 c	1.011 b	2.3 abc	9.5 bc
Deltapine 41	86.5 g	102.5 g	.973 fg	2.5 abc	9.1 bcd
Coker 420	90.0 f	105.3 f	1.027 a	1.7 c	9.3 bcd
Paymaster 303	99.3 b	112.2 b	.978 ef	3.0 ab	9.7 b
Ga Cot 79	92.4 def	107.0 cdef	.996 c	2.4 abc	9.1 bcd
Acala SJ-5	105.5 a	117.0 a	.990 cde	2.9 abc	10.4 a

Table 4. Eastern test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Florence, S. C. ...	1208 a	6.11 a	41.3 a	10.4 c	132 c
Tifton, Ga.	686 b	5.21 b	40.4 b	10.3 c	144 b
Ames Plantation, Tenn.	660 b	4.78 c	37.5 c	11.4 a	157 a
Jackson, Tenn.	623 b	4.96 bc	32.3 e	11.1 b	167 a
Milan, Tenn.	558 c	4.71 cd	35.5 d	11.0 b	166 a
Crossville, Ala. ..	504 cd	4.24 de	41.6 a	8.6 e	NA
Rocky Mt., N. C. ..	483 d	5.00 bc	39.9 b	9.3 d	143 b
Auburn, Ala.	168 e	3.92 e	40.3 b	NA	131 c

NA, Data not available.

Table 5. Eastern test: Fiber data by test location

Location	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Florence, S. C. ...	1.04 d	0.49 cd	198 b	6.4 a	5.45 a
Tifton, Ga.	1.06 c	.50 c	199 b	5.4 c	5.15 b
Ames Plantation, Tenn.	1.14 b	.54 a	204 b	5.9 b	4.62 d
Jackson, Tenn.	1.18 a	.55 a	222 a	6.0 b	4.02 f
Milan, Tenn.	1.14 b	.52 b	205 b	5.5 c	4.21 e
Crossville, Ala. ..	NA	NA	NA	NA	NA
Rocky Mt., N. C. ..	1.02 e	.48 d	188 c	6.4 a	4.62 d
Auburn, Ala.	1.01 e	.45 e	179 c	5.3 c	4.79 c

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Florence, S. C. ...	1.04 d	82.2 c	23.7 bc	68.9 b	9.4 e
Tifton, Ga.	1.08 c	83.5 b	24.2 bc	64.8 c	9.4 e
Ames Plantation, Tenn.	1.17 b	84.5 a	24.7 b	68.3 b	11.8 c
Jackson, Tenn.	1.22 a	83.8 ab	26.0 a	71.8 a	12.7 b
Milan, Tenn.	1.18 b	83.6 b	24.4 bc	71.6 a	13.1 a
Crossville, Ala. ..	NA	NA	NA	NA	NA
Rocky Mt., N. C. ..	1.02 e	82.2 c	23.3 cd	69.2 b	9.9 d
Auburn, Ala.	1.02 de	81.5 d	22.4 d	67.2 b	9.9 d

NA, Data not available.

Table 6. Eastern test: Seed data by test location

Location	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Florence, S. C. ...	18.7 a	3.69 b	0.83 a	12.1 b	4.6 c
Tifton, Ga.	18.1 b	3.56 d	.60 c	12.1 b	6.2 a
Ames Plantation, Tenn.	17.5 c	3.47 e	.64 b	11.3 bc	4.0 d
Jackson, Tenn.	16.6 e	3.62 c	.53 d	9.8 de	4.2 d
Milan, Tenn.	16.9 d	3.61 cd	.52 d	9.2 e	4.1 d
Crossville, Ala. ..	NA	NA	NA	NA	NA
Rocky Mt., N. C. ..	18.2 b	3.85 a	.60 c	10.7 cd	5.2 b
Auburn, Ala.	NA	NA	NA	NA	NA
Athens, Ga.	18.3 b	3.47 e	.53 d	13.1 a	5.3 b

Location	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Florence, S. C. ...	87.5 d	103.4 d	1.056 a	1.1 e	9.2 c
Tifton, Ga.	92.0 c	106.9 d	1.035 b	1.7 de	9.5 bc
Ames Plantation, Tenn.	103.0 b	115.3 b	.939 c	3.4 b	10.0 a
Jackson, Tenn.	109.2 a	120.0 a	.904 e	4.8 a	9.8 ab
Milan, Tenn.	103.2 b	115.7 b	.916 d	2.5 c	9.5 bc
Crossville, Ala. ..	NA	NA	NA	NA	NA
Rocky Mt., N. C. ..	83.5 e	100.2 e	1.040 b	2.2 cd	8.7 d
Auburn, Ala.	NA	NA	NA	NA	NA
Athens, Ga.	78.6 f	96.1 f	1.042 b	1.7 de	8.2 e

NA, Data not available.

Table 7. Eastern test: Yield, boll and yarn tenacity data for Florence, S.C.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 220	1385 a	5.93	40.6	10.3	138
Coker 315	1344 ab	6.58	41.8	10.7	132
McNair 235	1324 abc	5.83	41.9	10.1	137
Deltapine 61	1318 abc	6.13	41.6	9.9	125
Stoneville 213	1309 abc	5.99	41.9	10.1	118
Coker 420	1294 abc	5.55	49.7	10.4	140
Coker 8304	1285 abc	6.16	41.2	10.5	129
Stoneville 506	1258 abcd	5.51	41.8	10.4	119
Coker 310	1226 abcd	6.84	40.8	10.7	138
Deltapine 55	1173 bcd	6.08	43.6	9.3	126
Ga Cot 79	1150 cd	6.63	39.3	10.1	135
Deltapine 41	1090 d	5.33	44.5	9.7	134
Paymaster 303	911 e	6.62	40.3	11.3	118
Acala SJ-5	840 e	6.67	39.1	12.2	164

Table 8. Eastern test: Fiber data for Florence, S.C.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
McNair 220	1.02	0.48	217	5.9	5.45
Coker 315	1.04	.50	194	6.0	5.40
McNair 235	1.04	.49	202	5.6	5.35
Deltapine 61	1.02	.49	204	7.7	5.90
Stoneville 213	1.01	.48	184	7.2	5.80
Coker 420	1.05	.50	204	6.4	5.35
Coker 8304	1.05	.50	191	6.2	5.45
Stoneville 506	1.03	.50	184	6.7	5.65
Coker 310	1.05	.50	190	5.9	5.25
Deltapine 55	1.02	.48	187	6.0	5.60
Ga Cot 79	1.04	.50	213	6.9	5.40
Deltapine 41	1.03	.48	205	6.0	5.65
Paymaster 303	1.00	.46	169	6.3	5.15
Acala SJ-5	1.10	.54	231	6.4	4.90

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
McNair 220	1.01	81.0	24.5	70.5	9.3
Coker 315	1.07	82.0	23.0	68.5	9.8
McNair 235	1.08	82.5	23.5	64.0	9.9
Deltapine 61	1.02	82.5	22.5	70.5	9.0
Stoneville 213	1.04	83.0	22.5	69.8	9.2
Coker 420	1.06	84.0	24.0	68.2	8.9
Coker 8304	1.02	82.0	21.5	69.2	9.3
Stoneville 506	1.02	82.0	22.0	68.5	9.2
Coker 310	1.06	81.5	26.5	68.8	9.6
Deltapine 55	1.02	81.5	21.0	68.5	9.6
Ga Cot 79	1.04	82.0	25.0	70.8	9.2
Deltapine 41	1.03	82.5	23.0	70.8	9.5
Paymaster 303	1.00	81.5	24.0	70.0	9.7
Acala SJ-5	1.10	83.5	28.5	67.2	9.1

Table 9. Eastern test: Seed data for Florence, S.C.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
McNair 220	19.1	3.61	0.77	12.0	5.0
Coker 315	18.8	3.74	.83	13.0	4.0
McNair 235	18.8	3.60	.94	11.8	5.0
Deltapine 61	19.4	3.60	.90	11.6	6.0
Stoneville 213	17.6	3.73	.83	13.8	4.0
Coker 420	19.0	3.69	1.04	15.9	3.0
Coker 8304	18.6	3.78	.80	12.6	4.5
Stoneville 506	18.7	3.67	.84	11.2	5.0
Coker 310	18.7	3.73	.75	11.7	4.0
Deltapine 55	18.1	3.73	.89	10.1	5.0
Ga Cot 79	18.7	3.54	.86	11.6	5.5
Deltapine 41	18.8	3.71	.92	9.8	5.5
Paymaster 303	18.9	3.66	.68	12.1	4.5
Acala SJ-5	19.0	3.83	.64	11.6	3.0

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
McNair 220	90.1	105.5	1.040	0.8	9.4
Coker 315	88.5	104.2	1.063	1.0	9.4
McNair 235	85.9	102.1	1.050	1.6	10.2
Deltapine 61	85.7	102.0	1.056	.5	9.4
Stoneville 213	88.1	103.9	1.032	.6	9.0
Coker 420	80.1	97.6	1.097	.3	8.8
Coker 8304	85.0	101.5	1.065	2.3	9.3
Stoneville 506	87.2	103.2	1.074	1.0	9.4
Coker 310	89.2	104.7	1.062	1.3	9.5
Deltapine 55	78.8	96.4	1.063	.0	8.4
Ga Cot 79	86.2	102.4	1.057	.5	9.1
Deltapine 41	80.1	97.5	1.066	.9	8.5
Paymaster 303	97.4	111.1	1.017	3.8	9.9
Acala SJ-5	103.2	115.4	1.042	1.3	10.8

Table 10. Eastern test: Yield, boll and yarn tenacity data for Tifton, Ga.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	793 a	5.27	41.1	10.4	132
Deltapine 41	772 ab	4.65	43.5	9.1	146
Stoneville 506	760 ab	4.64	39.7	10.4	140
Deltapine 61	741 ab	5.04	40.0	10.2	132
Deltapine 55	739 ab	5.08	42.1	9.8	145
McNair 220	713 ab	5.33	39.0	10.1	146
Coker 315	712 ab	5.48	42.5	10.0	146
Coker 310	681 ab	5.76	39.6	10.8	138
Coker 8304	659 ab	5.73	41.4	11.2	142
Coker 420	658 ab	5.10	39.2	9.8	148
McNair 235	655 ab	4.93	40.8	9.6	146
Ga Cot 79	628 abc	4.92	39.4	9.5	146
Paymaster 303	616 bc	5.78	38.0	11.3	126
Acala SJ-5	482 c	5.23	39.8	11.5	182

Table 11. Eastern test: Fiber data for Tifton, Ga.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 213	1.06	0.52	173	5.6	5.25
Deltapine 41	1.06	.49	201	5.6	5.30
Stoneville 506	1.08	.50	195	6.0	5.30
Deltapine 61	1.08	.52	198	7.0	5.50
Deltapine 55	1.04	.48	188	5.4	5.20
McNair 220	1.03	.51	206	4.9	5.10
Coker 315	1.10	.53	204	4.8	5.15
Coker 310	1.10	.50	194	5.2	5.10
Coker 8304	1.10	.54	198	4.6	5.30
Coker 420	1.10	.54	220	5.4	5.15
McNair 235	1.02	.49	197	5.2	5.15
Ga Cot 79	1.01	.48	198	6.0	5.35
Paymaster 303	.96	.44	178	4.9	4.75
Acala SJ-5	1.10	.54	239	5.2	4.55

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Stoneville 213	1.10	83.5	24.0	70.2	10.1
Deltapine 41	1.10	83.5	24.5	67.5	10.2
Stoneville 506	1.10	83.5	24.5	65.8	8.4
Deltapine 61	1.09	84.0	24.0	61.0	9.2
Deltapine 55	1.09	83.0	23.5	67.5	9.5
McNair 220	1.06	84.5	24.0	65.5	9.3
Coker 315	1.06	82.5	23.0	63.8	10.6
Coker 310	1.12	82.5	25.5	60.5	8.2
Coker 8304	1.12	83.5	24.0	58.2	9.2
Coker 420	1.12	85.0	25.0	67.2	9.1
McNair 235	1.03	83.5	23.0	65.5	9.5
Ga Cot 79	1.01	83.0	23.0	61.5	8.3
Paymaster 303	1.00	82.5	22.0	66.8	10.0
Acala SJ-5	1.12	85.0	29.0	65.8	10.1

Table 12. Eastern test: Seed data for Tifton, Ga.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 213	16.3	3.36	0.64	14.0	5.5
Deltapine 41	16.7	3.57	.60	11.4	6.5
Stoneville 506	17.4	3.61	.47	12.1	6.5
Deltapine 61	18.7	3.52	.55	11.5	7.0
Deltapine 55	17.2	3.51	.65	11.6	6.0
McNair 220	18.3	3.57	.56	11.8	7.0
Coker 315	18.8	3.59	.64	13.1	5.5
Coker 310	18.3	3.54	.67	12.8	6.0
Coker 8304	18.9	3.64	.66	12.2	7.0
Coker 420	19.5	3.65	.76	14.0	5.0
McNair 235	18.8	3.66	.62	11.5	6.0
Ga Cot 79	17.8	3.48	.49	11.6	7.0
Paymaster 303	19.3	3.63	.63	11.0	6.0
Acala SJ-5	18.1	3.61	.51	10.7	5.5

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Stoneville 213	96.4	110.3	1.007	1.3	9.4
Deltapine 41	82.5	99.4	1.019	2.8	9.5
Stoneville 506	94.4	108.8	1.026	1.5	9.7
Deltapine 61	92.9	107.7	1.036	0.3	9.6
Deltapine 55	89.2	104.7	1.025	1.0	9.1
McNair 220	93.3	107.9	1.021	1.3	9.5
Coker 315	86.8	102.9	1.057	1.0	9.2
Coker 310	96.0	110.0	1.055	2.0	10.1
Coker 8304	92.2	107.1	1.063	2.0	9.7
Coker 420	87.3	103.3	1.069	1.8	9.3
McNair 235	88.5	104.2	1.021	2.5	9.0
Ga Cot 79	84.0	100.7	1.048	1.0	8.8
Paymaster 303	101.3	113.1	1.021	2.0	10.3
Acala SJ-5	104.1	116.1	1.020	3.5	10.6

Table 13. Eastern test: Yield, boll and yarn tenacity data for Ames Plantation, Tenn.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 235	756 a	4.77	39.9	10.5	150
McNair 220	740 ab	4.88	38.5	11.4	150
Stoneville 213	739 ab	4.97	37.9	11.8	145
Coker 8304	699 abc	4.88	37.6	11.9	164
Stoneville 506	691 bcd	4.19	37.6	11.8	148
Deltapine 55	674 cde	4.71	38.6	10.9	146
Coker 315	673 cde	4.75	38.7	12.3	162
Coker 310	668 cde	5.30	38.4	11.4	154
Deltapine 61	663 cde	4.99	35.5	11.4	152
Deltapine 41	632 de	4.50	39.9	11.3	151
Coker 420	620 e	4.65	35.8	11.5	176
Paymaster 303	616 e	4.91	37.0	11.5	144
Acala SJ-5	549 f	5.17	36.8	12.2	198
Ga Cot 79	513 f	4.28	33.5	10.6	160

Table 14. Eastern test: Fiber data for Ames Plantation, Tenn.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
McNair 235	1.11	0.54	194	5.4	4.50
McNair 220	1.12	.54	199	5.1	4.60
Stoneville 213	1.10	.52	198	6.3	4.95
Coker 8304	1.18	.56	208	5.5	4.40
Stoneville 506	1.14	.54	196	6.0	4.85
Deltapine 55	1.15	.54	183	5.6	4.65
Coker 315	1.16	.56	200	6.4	4.60
Coker 310	1.14	.52	208	5.9	4.55
Deltapine 61	1.14	.55	202	7.1	5.10
Deltapine 41	1.16	.58	198	5.8	4.70
Coker 420	1.21	.61	226	6.2	4.40
Paymaster 303	1.06	.48	182	5.6	4.45
Acala SJ-5	1.16	.58	250	5.5	4.45
Ga Cot 79	1.13	.54	205	6.8	4.50

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
McNair 235	1.18	85.0	23.5	65.2	11.3
McNair 220	1.14	84.5	23.5	69.0	12.2
Stoneville 213	1.12	83.0	25.5	67.2	12.2
Coker 8304	1.21	85.0	25.0	70.8	12.3
Stoneville 506	1.16	84.5	24.5	70.8	11.1
Deltapine 55	1.13	82.5	22.0	71.5	11.9
Coker 315	1.22	85.0	26.0	68.0	11.9
Coker 310	1.14	83.5	24.0	61.0	11.0
Deltapine 61	1.18	84.5	25.0	71.0	11.3
Deltapine 41	1.17	84.5	23.5	71.0	12.0
Coker 420	1.25	85.5	26.0	70.2	11.7
Paymaster 303	1.10	83.5	22.0	65.5	12.2
Acala SJ-5	1.22	87.0	29.5	68.0	12.2
Ga Cot 79	1.18	85.0	25.5	67.2	11.3

Table 15. Eastern test: Seed data for Ames Plantation, Tenn.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
McNair 235	17.8	3.44	0.67	10.1	4.5
McNair 220	18.2	3.54	.71	9.3	4.0
Stoneville 213	15.7	3.29	.59	14.9	3.0
Coker 8304	18.4	3.52	.69	11.0	3.5
Stoneville 506	16.7	3.40	.67	11.9	4.0
Deltapine 55	16.5	3.48	.59	11.1	4.0
Coker 315	17.8	3.54	.72	10.6	4.0
Coker 310	18.1	3.45	.74	11.5	4.0
Deltapine 61	17.9	3.44	.71	11.0	5.0
Deltapine 41	16.4	3.56	.52	9.4	4.5
Coker 420	18.3	3.61	.96	14.2	3.0
Paymaster 303	18.4	3.46	.50	10.9	3.5
Acala SJ-5	18.8	3.70	.48	10.4	3.0
Ga Cot 79	16.1	3.20	.48	12.4	5.0

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
McNair 235	99.9	113.0	0.930	4.3	9.3
McNair 220	103.1	115.4	.927	2.5	9.3
Stoneville 213	101.0	113.8	.904	4.3	9.1
Coker 8304	102.5	115.0	.963	2.3	9.9
Stoneville 506	104.6	116.5	.907	5.5	9.5
Deltapine 55	100.1	113.1	.930	2.3	9.3
Coker 315	103.2	115.4	.978	1.8	9.8
Coker 310	102.1	114.7	.977	2.5	10.0
Deltapine 61	98.0	111.6	.941	5.0	9.7
Deltapine 41	97.6	111.3	.917	3.3	13.9
Coker 420	102.2	114.7	.964	1.8	10.3
Paymaster 303	109.1	119.8	.935	4.3	10.2
Acala SJ-5	116.0	124.8	.963	1.5	11.2
Ga Cot 79	103.1	115.3	.915	7.3	9.2

Table 16. Eastern test: Yield, boll and yarn tenacity data for Milan, Tenn.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	730 a	4.90	36.2	10.3	152
McNair 235	676 ab	4.76	36.8	10.7	162
Deltapine 55	586 bc	4.43	38.2	9.9	158
McNair 220	583 bc	4.69	36.5	12.2	168
Stoneville 506	569 bc	4.56	34.1	11.3	158
Deltapine 41	564 bc	4.67	38.4	10.2	166
Acala SJ-5	555 bc	4.86	34.3	11.1	199
Coker 310	541 bc	5.17	35.6	11.4	168
Coker 315	541 bc	4.99	36.4	10.9	180
Coker 8304	525 c	4.54	35.7	11.0	168
Deltapine 61	502 c	4.58	34.9	11.6	162
Coker 420	494 c	4.34	33.9	11.0	176
Paymaster 303	483 c	5.05	35.1	11.2	145
Ga Cot 79	459 c	4.36	31.7	11.7	166

Table 17. Eastern test: Fiber data for Milan, Tenn.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 213	1.14	0.50	193	6.0	4.60
McNair 235	1.15	.52	219	5.2	4.20
Deltapine 55	1.14	.51	182	5.4	4.00
McNair 220	1.12	.52	206	5.0	4.15
Stoneville 506	1.11	.50	201	5.6	4.25
Deltapine 41	1.14	.52	196	5.4	4.35
Acala SJ-5	1.19	.58	258	5.5	4.10
Coker 310	1.17	.55	206	5.2	4.25
Coker 315	1.18	.54	201	5.3	4.35
Coker 8304	1.15	.52	200	5.2	3.95
Deltapine 61	1.14	.50	209	6.0	4.45
Coker 420	1.20	.56	191	5.4	4.15
Paymaster 303	1.04	.47	182	5.0	4.05
Ga Cot 79	1.18	.54	226	6.5	4.05

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Stoneville 213	1.15	83.0	24.5	71.5	13.6
McNair 235	1.18	84.5	22.5	70.8	13.4
Deltapine 55	1.20	82.5	22.5	72.5	13.5
McNair 220	1.14	83.5	23.5	71.5	12.9
Stoneville 506	1.12	81.5	25.0	69.8	12.6
Deltapine 41	1.16	84.5	24.0	70.8	13.9
Acala SJ-5	1.19	86.0	29.0	74.0	13.0
Coker 310	1.22	85.0	22.0	73.8	12.6
Coker 315	1.24	83.5	26.5	71.5	12.8
Coker 8304	1.21	82.5	25.0	68.0	13.1
Deltapine 61	1.22	83.5	24.5	71.0	13.6
Coker 420	1.26	83.5	25.0	73.5	12.8
Paymaster 303	1.02	81.5	22.5	72.2	12.7
Ga Cot 79	1.24	85.0	25.5	72.2	12.8

Table 18. Eastern test: Seed data for Milan, Tenn.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 213	15.0	3.33	0.50	12.0	3.0
McNair 235	17.6	3.61	.54	9.9	4.5
Deltapine 55	15.9	3.50	.50	8.8	5.0
McNair 220	16.5	3.70	.44	8.6	4.0
Stoneville 506	16.1	3.54	.44	8.4	4.5
Deltapine 41	15.8	3.61	.47	7.2	4.5
Acala SJ-5	17.8	3.75	.47	9.0	3.0
Coker 310	17.3	3.79	.59	10.0	4.0
Coker 315	17.9	3.73	.57	8.8	4.0
Coker 8304	17.5	3.81	.54	9.0	4.0
Deltapine 61	17.3	3.56	.51	8.6	4.5
Coker 420	18.7	3.76	.79	10.5	4.0
Paymaster 303	17.9	3.62	.50	8.9	4.0
Ga Cot 79	16.2	3.22	.42	9.2	4.0

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Stoneville 213	100.3	113.3	0.900	2.5	9.0
McNair 235	98.0	115.4	.921	2.3	9.0
Deltapine 55	98.1	111.7	.884	2.5	8.7
McNair 220	103.3	115.5	.881	3.8	9.1
Stoneville 506	109.4	120.1	.889	2.8	9.7
Deltapine 41	95.9	110.0	.883	1.8	8.5
Acala SJ-5	113.9	123.3	.926	2.5	10.5
Coker 310	105.6	117.2	.939	3.0	9.9
Coker 315	102.6	115.0	.953	3.0	9.8
Coker 8304	102.3	114.8	.950	2.3	9.7
Deltapine 61	102.3	114.8	.913	2.0	9.3
Coker 420	98.2	111.7	.958	2.3	9.5
Paymaster 303	108.1	119.1	.908	2.8	9.9
Ga Cot 79	107.5	118.6	.917	1.5	9.9

Table 19. Eastern test: Yield, boll and yarn tenacity data for Jackson, Tenn.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 61	704 a	5.19	31.7	12.5	166
Paymaster 303	689 ab	6.05	32.5	11.3	154
McNair 220	684 ab	4.71	33.9	10.4	166
McNair 235	682 ab	4.89	33.9	9.8	162
Stoneville 213	677 abc	4.99	31.6	11.2	151
Stoneville 506	654 abcd	4.97	31.3	11.5	154
Deltapine 41	645 abcd	4.65	34.6	10.2	172
Coker 310	589 bcd	5.38	32.5	11.2	176
Acala SJ-5	584 bcd	5.12	32.5	11.6	188
Deltapine 55	582 bcd	4.02	33.5	10.5	164
Coker 8304	574 cd	5.16	31.5	10.6	166
Coker 420	557 d	4.50	31.3	11.2	180
Coker 315	557 d	5.47	33.6	10.8	167
Ga Cot 79	549 d	4.35	28.4	12.3	168

Table 20. Eastern test: Fiber data for Jackson, Tenn.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 61	1.20	0.60	216	7.2	4.65
Paymaster 303	1.11	.52	205	5.3	3.60
McNair 220	1.14	.52	216	5.8	3.95
McNair 235	1.15	.51	213	5.6	3.90
Stoneville 213	1.18	.54	217	5.8	4.25
Stoneville 506	1.18	.54	214	6.4	3.75
Deltapine 41	1.18	.56	213	5.6	4.15
Coker 310	1.25	.59	228	5.7	3.80
Acala SJ-5	1.20	.60	276	6.2	3.65
Deltapine 55	1.16	.50	211	5.8	3.95
Coker 8304	1.22	.58	210	5.3	4.30
Coker 420	1.21	.57	240	6.0	3.95
Coker 315	1.20	.56	222	5.5	4.25
Ga Cot 79	1.18	.57	225	7.3	4.10

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Deltapine 61	1.24	85.5	27.0	69.8	12.9
Paymaster 303	1.13	83.0	23.0	73.5	13.1
McNair 220	1.20	83.5	25.5	72.2	12.7
McNair 235	1.18	82.5	25.0	73.5	13.0
Stoneville 213	1.23	83.5	25.5	69.0	12.8
Stoneville 506	1.24	84.0	25.0	72.8	11.7
Deltapine 41	1.18	83.5	26.0	72.0	13.2
Coker 310	1.27	84.0	26.0	70.8	13.2
Acala SJ-5	1.22	86.0	28.5	73.2	12.0
Deltapine 55	1.18	82.0	26.0	70.2	13.4
Coker 8304	1.24	84.5	24.5	70.2	12.4
Coker 420	1.26	84.5	27.5	73.5	12.0
Coker 315	1.24	83.0	27.5	70.5	12.5
Ga Cot 79	1.22	84.5	27.5	73.8	12.6

Table 21. Eastern test: Seed data for Jackson, Tenn.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 61	16.7	3.52	0.47	8.9	4.5
Paymaster 303	17.5	3.68	.48	10.2	4.0
McNair 220	16.8	3.67	.47	9.6	4.5
McNair 235	16.7	3.61	.50	8.7	4.5
Stoneville 213	14.7	3.46	.47	13.4	3.0
Stoneville 506	16.0	3.54	.48	9.5	4.0
Deltapine 41	15.6	3.72	.52	9.1	4.5
Coker 310	17.1	3.77	.56	9.1	4.0
Acala SJ-5	16.7	3.64	.49	8.4	3.0
Deltapine 55	15.2	3.52	.46	9.2	5.0
Coker 8304	17.2	3.70	.57	9.6	4.5
Coker 420	18.8	3.81	.88	12.0	4.0
Coker 315	17.6	3.73	.52	9.3	4.5
Ga Cot 79	16.0	3.39	.51	9.7	4.5

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Deltapine 61	111.5	121.6	.912	3.3	10.1
Paymaster 303	110.6	121.0	.921	4.5	10.2
McNair 220	110.0	120.5	.877	4.3	10.7
McNair 235	107.6	119.1	.881	4.8	9.5
Stoneville 213	113.3	122.9	.849	9.0	9.2
Stoneville 506	113.1	122.7	.871	7.0	9.8
Deltapine 41	101.1	113.9	.884	3.8	8.9
Coker 310	109.9	120.4	.940	4.8	10.3
Acala SJ-5	114.7	123.9	.903	7.5	10.3
Deltapine 55	105.1	116.9	.880	3.3	9.3
Coker 8304	108.8	119.6	.938	3.8	10.2
Coker 420	104.0	116.0	.960	3.0	10.0
Coker 315	108.6	119.5	.922	5.8	10.0
Ga Cot 79	111.3	121.4	.918	3.0	10.2

Table 22. Eastern test: Yield, boll and yarn tenacity data for Crossville, Ala.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 235	598 a	3.96	42.6	7.9	NA
Deltapine 55	588 ab	4.42	42.3	8.5	NA
Stoneville 506	562 abc	3.65	41.4	8.1	NA
Deltapine 41	550 abcd	2.79	44.4	7.2	NA
McNair 220	534 abcd	4.26	4.15	8.3	NA
Coker 310	530 abcd	4.41	41.4	8.1	NA
Stoneville 213	521 abcd	4.22	42.7	8.1	NA
Coker 8304	511 abcd	5.18	42.2	8.9	NA
Paymaster 303	500 bcd	4.79	40.2	9.7	NA
Coker 420	494 cd	4.75	40.2	9.2	NA
Coker 315	485 cd	3.91	41.5	9.1	NA
Deltapine 61	463 de	4.23	41.0	8.6	NA
Acala SJ-5	386 ef	4.74	39.8	10.9	NA
Ga Cot 79	332 f	4.05	41.7	7.7	NA

NA, Data not available.

Table 23. Eastern test: Yield, boll and yarn tenacity data for Rocky Mount, N.C.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	539 a	4.85	39.3	9.0	138
McNair 235	536 a	4.75	41.4	8.9	137
McNair 220	536 a	4.80	40.2	8.9	146
Stoneville 506	530 a	4.74	40.1	9.4	123
Coker 315	522 a	5.31	41.5	9.4	144
Coker 420	502 ab	4.81	38.5	9.3	145
Coker 310	485 ab	5.16	39.6	9.7	140
Coker 8304	485 ab	4.71	40.5	9.6	138
Deltapine 55	464 bc	5.06	41.3	8.9	142
Deltapine 61	458 bc	5.02	38.5	9.8	146
Deltapine 41	446 bc	4.64	42.3	8.2	155
Acala SJ-5	422 c	5.97	39.1	10.2	183
Paymaster 303	418 c	5.57	39.3	9.8	120
Ga Cot 79	417 c	4.67	37.8	9.1	144

Table 24. Eastern test: Fiber data for Rocky Mount, N.C.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 213	1.01	0.48	193	7.4	4.40
McNair 235	.98	.46	171	5.2	4.70
McNair 220	.98	.46	192	5.5	4.40
Stoneville 506	1.04	.50	180	6.1	4.80
Coker 315	1.02	.48	187	6.5	4.80
Coker 420	1.06	.51	187	6.6	4.80
Coker 310	1.04	.49	174	6.2	4.20
Coker 8304	1.00	.46	184	6.2	4.90
Deltapine 55	1.02	.47	180	6.5	4.45
Deltapine 61	1.04	.52	204	7.8	4.80
Deltapine 41	1.00	.47	192	6.1	4.70
Acala SJ-5	1.05	.54	236	6.2	4.35
Paymaster 303	.96	.46	156	6.0	4.65
Ga Cot 79	1.02	.49	198	6.9	4.75

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Stoneville 213	1.02	82.0	24.5	66.5	10.3
McNair 235	.97	81.5	22.5	69.0	9.1
McNair 220	1.03	82.5	22.0	68.2	9.5
Stoneville 506	1.04	82.5	22.0	70.2	9.4
Coker 315	1.01	82.0	22.5	69.0	9.7
Coker 420	1.08	83.5	23.5	70.2	9.7
Coker 310	1.00	81.0	22.0	70.8	10.2
Coker 8304	1.02	82.5	22.0	67.8	9.3
Deltapine 55	1.02	82.0	22.0	69.5	10.0
Deltapine 61	1.04	84.0	25.0	68.0	9.7
Deltapine 41	1.06	83.5	22.5	70.2	10.9
Acala SJ-5	1.01	82.5	31.0	72.5	10.4
Paymaster 303	.96	81.0	21.0	66.8	9.9
Ga Cot 79	.98	81.0	23.5	70.5	10.5

Table 25. Eastern test: Seed data for Rocky Mount, N.C.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 213	17.5	3.78	0.64	11.2	5.0
McNair 235	18.2	3.75	.57	9.8	5.5
McNair 220	18.6	3.75	.55	10.4	6.0
Stoneville 506	17.8	3.81	.54	11.0	6.0
Coker 315	18.6	3.99	.58	10.6	4.5
Coker 420	19.0	3.99	.84	13.0	3.5
Coker 310	18.5	3.96	.59	10.9	4.5
Coker 8304	18.8	3.92	.57	11.1	5.0
Deltapine 55	17.4	3.87	.65	9.8	6.0
Deltapine 61	18.5	3.74	.57	10.3	6.0
Deltapine 41	17.2	3.84	.61	10.3	5.0
Acala SJ-5	19.2	3.97	.52	10.3	4.5
Paymaster 303	17.3	3.78	.57	10.6	5.0
Ga Cot 79	18.2	3.73	.60	10.3	6.0

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Stoneville 213	82.8	99.7	1.011	1.8	8.4
McNair 235	81.2	98.4	1.022	1.5	8.6
McNair 220	82.4	99.4	1.015	1.3	8.4
Stoneville 506	86.3	102.5	1.022	4.0	8.8
Coker 315	82.7	99.6	1.084	1.8	9.0
Coker 420	79.7	97.2	1.081	1.5	8.6
Coker 310	82.7	99.6	1.066	1.8	8.8
Coker 8304	84.7	101.2	1.070	.8	8.6
Deltapine 55	81.0	98.2	1.026	3.3	8.3
Deltapine 61	84.3	100.8	1.043	3.0	9.1
Deltapine 41	75.9	94.1	1.011	3.0	7.7
Acala SJ-5	93.8	108.3	1.043	1.5	9.8
Paymaster 303	90.9	106.1	1.009	3.0	9.2
Ga Cot 79	80.6	97.9	1.053	2.5	8.5

Table 26. Eastern test: Yield, boll and yarn tenacity data for Auburn, Ala.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 235	220 a	4.05	41.2	NA	122
McNair 220	218 a	3.82	40.7	NA	134
Deltapine 55	197 ab	3.61	42.5	NA	120
Stoneville 213	195 ab	3.99	41.4	NA	130
Deltapine 41	194 ab	3.74	4.26	NA	131
Deltapine 61	173 ab	4.21	3.99	NA	136
Coker 8304	166 ab	4.39	4.07	NA	134
Coker 315	160 ab	3.88	3.96	NA	128
Coker 420	160 ab	3.83	38.7	NA	138
Ga Cot 79	151 b	3.48	38.8	NA	119
Stoneville 506	150 b	3.55	40.3	NA	123
Coker 310	149 b	4.11	39.8	NA	140
Paymaster 303	134 bc	4.50	38.9	NA	110
Acala SJ-5	88 c	3.76	39.9	NA	162

NA, Data not available.

Table 27. Eastern test: Fiber data for Auburn, Ala.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
McNair 235	1.02	0.46	172	5.1	4.70
McNair 220	.98	.44	166	4.9	5.05
Deltapine 55	1.01	.46	162	5.3	4.45
Stoneville 213	1.00	.46	174	5.7	5.30
Deltapine 41	1.00	.44	168	5.0	4.80
Deltapine 61	1.04	.47	173	6.3	5.20
Coker 8304	1.00	.44	186	4.8	4.70
Coker 315	1.00	.42	184	4.9	4.85
Coker 420	1.05	.48	200	5.4	4.65
Ga Cot 79	.99	.44	194	7.0	4.80
Stoneville 506	1.00	.46	166	5.2	5.10
Coker 310	1.04	.46	181	5.0	4.75
Paymaster 303	.97	.43	160	4.7	4.45
Acala SJ-5	1.06	.48	218	5.0	4.25

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
McNair 235	1.02	81.0	21.5	63.8	9.4
McNair 220	1.02	82.0	22.5	66.5	9.6
Deltapine 55	1.03	81.5	21.5	69.8	9.4
Stoneville 213	1.02	81.5	22.0	63.5	10.0
Deltapine 41	1.00	82.0	22.0	67.5	10.0
Deltapine 61	1.04	82.5	23.0	68.5	9.3
Coker 8304	1.04	82.0	20.0	67.5	10.1
Coker 315	1.06	81.0	23.0	68.2	10.2
Coker 420	1.08	83.5	23.5	67.2	9.7
Ga Cot 79	.98	81.0	22.5	69.2	10.3
Stoneville 506	1.06	81.5	22.0	64.5	9.8
Coker 310	1.00	80.5	22.0	69.8	10.4
Paymaster 303	.94	80.0	20.5	67.2	10.2
Acala SJ-5	1.04	81.5	27.0	67.2	10.5

Table 28. Eastern test: Seed data for Athens, Ga.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Acala SJ-5	19.1	3.79	0.45	10.7	5.0
Coker 310	18.7	3.55	.57	13.0	5.0
Coker 315	18.3	3.42	.59	13.4	5.5
Coker 420	18.9	3.42	.73	10.5	4.0
Coker 8304	18.6	3.47	.50	13.4	5.0
Deltapine 41	17.1	3.61	.54	7.8	5.0
Deltapine 55	17.5	3.43	.53	9.9	5.5
Deltapine 61	18.9	3.37	.50	13.0	5.0
Ga Cot 79	18.6	3.38	.48	11.6	6.5
McNair 235	18.8	3.52	.43	16.6	6.5
McNair 220	19.0	3.35	.58	12.8	5.5
Paymaster 303	19.0	3.31	.59	19.7	6.0
Stoneville 213	16.2	3.46	.50	14.8	4.5
Stoneville 506	18.2	3.46	.44	16.4	5.0

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Acala SJ-5	92.7	107.5	1.031	2.3	9.5
Coker 310	78.8	96.5	1.037	1.0	8.2
Coker 315	78.5	96.2	1.065	1.5	8.4
Coker 420	78.7	96.4	1.058	1.3	8.3
Coker 8304	77.7	95.5	1.056	1.8	8.2
Deltapine 41	72.5	91.3	1.034	2.0	7.7
Deltapine 55	83.5	99.0	.998	1.8	8.2
Deltapine 61	81.1	98.4	1.035	2.0	8.4
Ga Cot 79	74.4	92.8	1.064	1.0	7.9
McNair 235	72.6	91.3	1.064	3.3	7.8
McNair 220	78.3	96.1	1.054	.0	8.3
Paymaster 303	77.7	95.5	1.038	.8	8.1
Stoneville 213	77.5	95.4	1.032	2.0	8.0
Stoneville 506	76.2	94.2	1.021	2.8	7.8

Table 29. Delta test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 41	973 a	4.39 e	41.2 a	9.4 e	148 bcde
Stoneville 825N ...	952 ab	4.86 d	38.0 c	10.8 c	143 efg
DES 56	935 abc	4.27 e	37.9 c	10.6 c	141 fg
Stoneville 213	916 bc	5.02 cd	37.9 c	10.8 c	138 g
Deltapine 61	911 bc	5.22 bc	37.6 cd	10.6 c	144 defg
Deltapine 55	899 cd	4.98 cd	38.8 b	10.0 d	145 cdef
McNair 235	888 cd	4.44 e	37.7 cd	10.8 c	151 bcd
Coker 8304	855 de	5.42 ab	37.0 de	11.4 b	152 bc
Coker 310	838 e	5.20 bc	36.7 ef	11.6 b	153 b
Paymaster 303	681 f	5.59 a	36.1 f	12.6 a	140 fg
Acala SJ-5	639 f	5.40 ab	37.4 cde	12.5 a	176 a

Table 30. Delta test: Fiber data by cotton variety

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 41	1.11 ab	0.52 bc	193 bcd	5.8 bcd	4.97 bc
Stoneville 825N ...	1.10 b	.50 cd	184 d	5.0 e	5.14 ab
DES 56	1.10 b	.52 bc	190 bcd	5.9 bc	4.89 cd
Stoneville 213	1.11 b	.51 bc	186 cd	6.0 b	5.03 abc
Deltapine 61	1.12 ab	.52 b	196 b	6.6 a	5.16 a
Deltapine 55	1.11 b	.51 bc	187 cd	5.8 bcd	4.89 cd
McNair 235	1.10 b	.51 bc	198 b	5.3 de	4.84 cd
Coker 8304	1.13 a	.52 bc	194 bc	5.5 cd	4.72 de
Coker 310	1.12 ab	.52 bc	196 b	5.3 de	4.64 e
Paymaster 303	1.05 c	.48 d	186 cd	5.4 cd	4.61 e
Acala SJ-5	1.14 a	.55 a	236 a	5.5 cd	4.61 e

Variety	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Deltapine 41	1.14 abc	84.1 ab	23.6 bc	68.6 a	10.4 a
Stoneville 825N ...	1.13 bc	84.0 abc	22.7 c	69.1 a	10.1 a
DES 56	1.13 bc	83.9 abc	23.3 bc	68.6 a	10.4 a
Stoneville 213	1.12 c	83.4 bcd	23.1 bc	68.3 a	10.6 a
Deltapine 61	1.15 abc	84.3 a	22.7 c	70.0 a	10.2 a
Deltapine 55	1.14 abc	83.2 cd	23.1 bc	70.4 a	10.2 a
McNair 235	1.15 abc	84.0 abc	24.1 b	69.4 a	10.5 a
Coker 8304	1.16 ab	83.8 abc	23.9 bc	69.0 a	10.3 a
Coker 310	1.17 a	84.3 a	23.8 bc	69.1 a	10.2 a
Paymaster 303	1.07 d	82.8 d	23.6 bc	68.7 a	10.3 a
Acala SJ-5	1.15 abc	84.6 a	27.6 a	70.1 a	10.3 a

Table 31. Delta test: Seed data by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 41	16.9 g	3.48 c	0.70 ab	12.5 ab	5.1 a
Stoneville 825N ...	17.6 e	3.35 e	.74 ab	13.7 ab	4.3 b
DES 56	18.7 c	3.45 cd	.75 a	11.5 b	4.8 a
Stoneville 213	17.2 fg	3.36 e	.70 b	14.4 a	3.8 c
Deltapine 61	18.1 d	3.38 de	.64 c	13.1 ab	5.0 a
Deltapine 55	17.5 ef	3.45 cd	.73 ab	12.7 ab	4.9 a
McNair 235	18.8 bc	3.42 cde	.72 ab	12.1 ab	4.9 a
Coker 8304	19.5 a	3.46 c	.74 ab	12.6 ab	4.4 b
Coker 310	19.2 ab	3.48 c	.74 ab	13.5 ab	4.3 b
Paymaster 303	19.0 bc	3.57 b	.58 d	13.3 ab	4.4 b
Acala SJ-5	19.4 a	3.64 a	.51 e	12.2 ab	4.4 b

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Deltapine 41	90.4 d	105.7 d	0.912 f	1.2 d	8.3 e
Stoneville 825N ...	101.4 bc	114.0 bc	.921 def	3.8 a	9.4 c
DES 56	98.8 c	112.0 c	.938 cd	2.1 bcd	9.3 c
Stoneville 213	101.2 bc	113.8 bc	.917 ef	2.7 abc	9.3 c
Deltapine 61	100.3 c	113.2 c	.920 ef	2.4 bcd	9.3 c
Deltapine 55	94.0 d	108.4 d	.932 cde	1.5 cd	8.7 d
McNair 235	101.5 bc	114.1 bc	.924 def	3.3 ab	9.4 c
Coker 8304	102.8 bc	114.9 bc	.966 a	2.2 bcd	9.8 b
Coker 310	105.1 b	116.9 b	.966 a	2.1 bcd	10.1 b
Paymaster 303	114.5 a	123.8 a	.942 bc	3.6 a	10.7 a
Acala SJ-5	114.7 a	123.8 a	.958 ab	2.8 abc	11.0 a

Table 32. Delta test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
St. Joseph, La. ...	1495 a	5.12 ab	39.9 a	10.7 cd	144 c
Portageville, Mo. .	1005 b	5.36 a	36.6 bc	11.2 bc	132 d
Marianna, Ark.	996 b	NA	39.5 a	10.9 c	146 c
Stoneville, Miss. .	888 c	4.80 cd	37.1 b	10.6 cd	154 b
Ridgely, Tenn.	694 d	4.61 d	36.5 bc	11.4 b	162 a
Tunica, Miss.	542 e	5.02 bc	39.4 a	10.5 d	142 c
Clarkedale, Ark. ..	332 f	NA	36.0 c	11.8 a	157 ab

NA, Data not available.

Table 33. Delta test: Fiber data by test location

Location	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
St. Joseph, La. ...	1.11 c	0.52 c	189 b	5.8 a	4.68 d
Portageville, Mo. .	1.11 bc	.49 d	194 b	5.7 ab	4.63 d
Marianna, Ark.	1.09 d	.51 c	196 b	5.6 ab	5.42 a
Stoneville, Miss. .	1.12 b	.53 ab	195 b	5.5 bc	4.61 d
Ridgely, Tenn.	1.11 c	.52 bc	208 a	5.9 a	4.97 b
Tunica, Miss.	1.07 e	.50 d	187 b	5.3 c	4.91 bc
Clarkedale, Ark. ..	1.16 a	.54 a	197 b	5.7 ab	4.84 c

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
St. Joseph, La. ...	1.14 bc	84.1 ab	23.3 b	69.0 b	10.7 c
Portageville, Mo. .	1.14 c	82.3 c	25.3 a	65.8 c	9.9 d
Marianna, Ark.	1.10 d	84.0 ab	23.0 bc	70.6 ab	11.2 ab
Stoneville, Miss. .	1.14 bc	83.7 b	23.7 b	71.5 a	11.0 bc
Ridgely, Tenn.	1.15 b	84.6 a	25.7 a	71.8 a	11.3 a
Tunica, Miss.	1.08 e	83.6 b	22.1 c	66.2 c	8.7 e
Clarkedale, Ark. ..	1.19 a	84.5 a	23.4 b	69.5 b	9.6 d

Table 34. Delta test: Seed data by test location

Location	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
St. Joseph, La. ...	19.5 a	3.28 e	0.82 a	13.4 bc	4.9 b
Portageville, Mo. .	18.1 b	3.53 b	.78 b	10.5 e	5.6 a
Marianna, Ark.	18.2 b	3.52 b	.65 d	13.2 cd	4.5 c
Stoneville, Miss. ..	18.1 b	3.38 d	.66 d	15.2 a	4.1 de
Ridgely, Tenn.	17.9 b	3.44 c	.54 f	11.8 de	4.0 e
Tunica, Miss.	17.3 c	3.74 a	.61 e	15.0 ab	4.3 cd
Clarkedale, Ark. ..	19.5 a	3.31 e	.74 c	11.6 de	4.5 c

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
St. Joseph, La. ...	101.1 cd	113.8 cd	0.917 d	3.0 b	9.2 cd
Portageville, Mo. .	105.8 b	117.3 b	.958 a	4.5 a	10.2 b
Marianna, Ark.	102.0 c	114.5 c	.928 bcd	1.8 c	9.5 c
Stoneville, Miss. .	96.7 e	110.4 e	.934 bc	2.7 bc	9.0 d
Ridgely, Tenn.	100.8 cd	113.6 cd	.953 a	1.9 c	9.6 c
Tunica, Miss.	97.6 de	111.1 de	.923 cd	1.9 c	9.1 d
Clarkedale, Ark. ..	111.7 a	121.6 a	.939 b	1.9 c	10.6 a

Table 35. Delta test: Yield, boll and yarn tenacity data for St. Joseph, La.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 41	1909 a	4.52	44.1	8.7	133
Deltapine 55	1788 ab	4.85	42.2	9.6	140
Stoneville 825N ...	1630 bc	4.96	39.2	11.0	136
DES 56	1617 bc	4.43	39.1	10.4	140
McNair 235	1580 cd	4.90	39.6	10.5	150
Deltapine 61	1508 cde	5.43	40.5	9.9	135
Stoneville 213	1508 cde	5.17	40.2	10.8	130
Coker 8304	1405 de	5.52	39.2	11.1	152
Coker 310	1382 e	5.86	38.2	11.2	153
Paymaster 303	1190 f	5.09	37.9	12.6	134
Acala SJ-5	928 g	5.59	39.2	11.9	176

Table 36. Delta test: Fiber data for St. Joseph, La.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 41	1.10	0.51	182	5.6	4.7
Deltapine 55	1.10	.51	174	5.9	4.7
Stoneville 825N ...	1.11	.50	182	5.2	5.0
DES 56	1.10	.51	175	6.1	4.6
McNair 235	1.10	.53	210	5.4	4.6
Deltapine 61	1.10	.52	191	7.0	4.9
Stoneville 213	1.10	.51	172	6.6	5.0
Coker 8304	1.18	.56	196	5.6	4.4
Coker 310	1.15	.53	192	5.2	4.4
Paymaster 303	1.02	.46	184	5.5	4.6
Acala SJ-5	1.11	.54	218	5.6	4.6

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Deltapine 41	1.12	83.5	22.0	69.0	11.1
Deltapine 55	1.12	82.5	23.5	69.5	10.9
Stoneville 825N ...	1.16	84.0	21.0	69.8	10.4
DES 56	1.14	84.0	22.5	67.2	10.9
McNair 235	1.16	85.0	25.5	67.2	11.5
Deltapine 61	1.15	85.5	22.0	67.8	10.2
Stoneville 213	1.12	84.0	20.5	69.8	11.2
Coker 8304	1.20	84.5	24.5	69.2	9.9
Coker 310	1.20	84.5	24.5	67.2	9.9
Paymaster 303	1.07	83.0	24.5	71.2	10.8
Acala SJ-5	1.15	84.5	26.0	71.2	11.0

Table 37. Delta test: Seed data for St. Joseph, La.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 41	17.2	3.30	0.87	12.1	5.5
Deltapine 55	18.9	3.21	.90	12.9	4.5
Stoneville 825N ...	18.6	3.20	.95	15.1	4.5
DES 56	19.5	3.33	.92	14.4	5.0
McNair 235	20.0	3.16	.80	14.2	5.0
Deltapine 61	19.0	3.13	.79	15.8	5.0
Stoneville 213	18.2	3.14	.84	14.8	4.0
Coker 8304	20.5	3.33	.88	12.2	5.0
Coker 310	20.5	3.29	.87	13.2	5.0
Paymaster 303	20.5	3.38	.65	12.3	5.0
Acala SJ-5	20.2	3.61	.57	10.9	5.0

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Deltapine 41	88.1	103.9	0.905	0.5	8.0
Deltapine 55	90.9	106.1	.931	2.0	8.5
Stoneville 825N ...	103.1	115.4	.905	5.3	9.3
DES 56	95.3	109.5	.901	2.0	8.6
McNair 235	102.3	114.8	.873	6.5	8.9
Deltapine 61	96.3	110.3	.885	2.3	8.5
Stoneville 213	100.4	113.4	.907	5.0	9.1
Coker 8304	100.7	112.6	.960	.8	9.2
Coker 310	102.7	115.1	.948	2.8	9.7
Paymaster 303	119.0	127.9	.939	3.0	10.7
Acala SJ-5	113.2	122.8	.937	2.5	11.1

Table 38. Delta test: Yield, boll and yarn tenacity data for Marianna, Ark.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 41	1225 a	NA	42.6	9.4	149
Stoneville 825N ...	1187 ab	NA	41.9	10.3	132
Deltapine 61	1142 abc	NA	40.2	10.7	150
McNair 235	1060 abc	NA	39.7	10.6	141
Coker 8304	1054 abc	NA	37.9	11.5	158
DES 56	957 abcd	NA	39.8	10.8	136
Stoneville 213	949 abcd	NA	39.3	10.5	138
Deltapine 55	924 abcd	NA	39.8	10.2	146
Paymaster 303	877 bcd	NA	36.8	12.1	138
Coker 310	858 cd	NA	38.1	11.7	156
Acala SJ-5	729 d	NA	38.4	12.5	164

NA, Data not available.

Table 39. Delta test: Fiber data for Marianna, Ark.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 41	1.08	0.52	197	5.4	5.60
Stoneville 825N ...	1.05	.48	181	5.0	5.95
Deltapine 61	1.12	.55	201	7.4	5.65
McNair 235	1.08	.51	198	5.6	5.55
Coker 8304	1.16	.55	191	5.4	5.50
DES 56	1.08	.51	192	6.2	5.60
Stoneville 213	1.06	.50	186	6.0	5.70
Deltapine 55	1.10	.51	197	5.4	5.45
Paymaster 303	1.04	.47	188	5.3	4.70
Coker 310	1.09	.50	188	5.4	5.10
Acala SJ-5	1.12	.56	240	5.4	4.85

Variety	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Deltapine 41	1.10	84.5	24.0	65.5	10.9
Stoneville 825N ...	1.06	84.0	21.5	70.2	11.8
Deltapine 61	1.12	85.5	21.5	71.0	11.0
McNair 235	1.14	83.5	23.5	70.8	11.3
Coker 8304	1.15	84.0	22.5	73.2	11.4
DES 56	1.08	84.0	21.5	70.2	11.4
Stoneville 213	1.02	83.0	22.5	66.2	11.8
Deltapine 55	1.11	83.5	23.0	73.2	10.6
Paymaster 303	1.06	82.5	22.5	71.2	11.0
Coker 310	1.17	84.5	23.5	73.0	11.0
Acala SJ-5	1.13	85.0	26.5	72.2	11.3

Table 40. Delta test: Seed data for Marianna, Ark.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 41	17.2	3.48	0.72	12.4	5.0
Stoneville 825N ...	17.5	3.43	.72	10.9	4.5
Deltapine 61	18.1	3.48	.65	11.2	5.0
McNair 235	18.3	3.57	.75	10.6	5.0
Coker 8304	20.1	3.29	.79	14.0	4.0
DES 56	18.5	3.59	.69	10.5	4.5
Stoneville 213	16.3	3.48	.55	14.8	4.0
Deltapine 55	17.6	3.52	.74	13.1	5.0
Paymaster 303	18.5	3.65	.49	12.8	3.5
Coker 310	18.7	3.47	.67	14.9	4.0
Acala SJ-5	19.8	3.78	.44	19.3	4.5

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Deltapine 41	94.1	108.6	0.899	0.8	8.5
Stoneville 825N ...	100.8	113.6	.909	2.0	9.2
Deltapine 61	102.8	115.2	.923	.8	9.5
McNair 235	101.5	114.2	.931	1.0	9.5
Coker 8304	104.5	116.4	.942	4.0	9.8
DES 56	105.1	116.9	.923	1.3	9.7
Stoneville 213	100.5	113.4	.887	2.0	8.9
Deltapine 55	96.8	110.6	.911	.3	8.8
Paymaster 303	111.2	121.3	.946	2.5	10.5
Coker 310	101.9	114.5	.973	2.5	9.9
Acala SJ-5	103.1	115.1	.969	2.3	10.1

Table 41. Delta test: Yield, boll and yarn tenacity data for Portageville, Mo.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Coker 310	1136 a	5.70	36.2	11.9	120
Stoneville 825N ...	1088 ab	4.90	36.9	11.0	142
Stoneville 213	1072 ab	5.30	36.1	11.2	134
Deltapine 41	1071 ab	4.70	39.0	9.5	134
Coker 8304	1067 ab	5.80	36.5	11.2	133
Deltapine 61	1056 abc	5.45	35.3	10.9	128
DES 56	998 bcd	4.50	36.7	10.4	123
Deltapine 55	971 cd	5.15	36.5	10.1	132
McNair 235	919 de	4.90	36.1	11.3	138
Acala SJ-5	840 ef	6.30	38.1	12.6	150
Paymaster 303	832 f	6.25	35.2	13.0	124

Table 42. Delta test: Fiber data for Portageville, Mo.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Coker 310	1.06	0.46	194	5.3	4.45
Stoneville 825N ...	1.10	.50	186	4.8	4.85
Stoneville 213	1.15	.48	200	5.5	4.45
Deltapine 41	1.14	.50	192	7.4	4.85
Coker 8304	1.12	.50	178	5.8	4.30
Deltapine 61	1.09	.46	172	4.8	4.85
DES 56	1.12	.51	194	6.1	4.75
Deltapine 55	1.12	.50	196	5.9	4.75
McNair 235	1.11	.48	194	5.4	4.40
Acala SJ-5	1.13	.50	230	5.5	4.55
Paymaster 303	1.10	.49	193	6.0	4.75

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Coker 310	1.09	82.0	25.0	64.2	10.6
Stoneville 825N ...	1.13	83.5	23.5	62.5	10.3
Stoneville 213	1.16	81.0	25.0	67.5	9.9
Deltapine 41	1.18	84.0	26.0	65.5	9.7
Coker 8304	1.16	81.0	25.0	68.2	9.6
Deltapine 61	1.12	81.5	25.0	67.5	9.5
DES 56	1.15	83.5	26.0	64.0	10.3
Deltapine 55	1.14	82.5	25.0	66.8	9.8
McNair 235	1.13	81.5	24.5	66.0	9.4
Acala SJ-5	1.17	83.0	28.5	63.8	10.3
Paymaster 303	1.12	82.0	25.0	68.0	9.3

Table 43. Delta test: Seed data for Portageville, Mo.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Coker 310	18.6	3.59	0.91	10.9	5.5
Stoneville 825N ...	17.4	3.39	.89	12.0	5.0
Stoneville 213	17.5	3.41	.82	13.4	5.0
Deltapine 41	16.7	3.54	.78	10.1	6.0
Coker 8304	19.1	3.55	.76	10.7	5.5
Deltapine 61	17.4	3.45	.71	11.5	6.0
DES 56	18.6	3.56	.88	9.2	5.5
Deltapine 55	17.3	3.52	.78	9.0	5.5
McNair 235	18.8	3.51	.75	9.8	5.5
Acala SJ-5	19.8	3.73	.58	8.4	6.0
Paymaster 303	18.5	3.59	.76	10.3	6.0

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Coker 310	112.4	122.2	0.988	4.8	11.1
Stoneville 825N ...	104.0	116.1	.954	6.3	10.2
Stoneville 213	102.3	114.8	.972	4.3	9.9
Deltapine 41	93.4	108.0	.932	1.8	8.7
Coker 8304	99.9	113.0	.980	5.0	9.8
Deltapine 61	103.5	115.7	.919	6.5	9.7
DES 56	102.2	114.7	.963	3.3	10.1
Deltapine 55	99.3	112.5	.958	3.3	9.2
McNair 235	105.8	117.4	.952	6.0	10.1
Acala SJ-5	122.0	129.1	.980	2.8	11.9
Paymaster 303	119.5	127.3	.946	6.3	11.3

Table 44. Delta test: Yield, boll and yarn tenacity data for Stoneville, Miss.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
DES 56	1040 a	4.54	37.4	10.1	152
Deltapine 61	998 ab	4.96	37.0	10.7	153
McNair 235	993 ab	4.62	36.7	10.5	159
Stoneville 213	982 ab	4.59	37.5	10.6	144
Stoneville 825N ...	968 ab	4.68	36.2	10.5	142
Deltapine 41	955 ab	4.30	41.2	8.8	148
Deltapine 55	908 bc	4.77	38.1	9.7	150
Coker 8304	848 cd	4.77	36.5	11.0	160
Coker 310	776 d	5.11	35.2	11.3	157
Acala SJ-5	655 e	5.19	37.1	11.5	186
Paymaster 303	648 e	5.34	35.4	11.9	146

Table 45. Delta test: Fiber data for Stoneville, Miss.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
DES 56	1.12	0.52	192	5.7	4.60
Deltapine 61	1.16	.56	198	6.6	5.10
McNair 235	1.12	.53	203	5.0	4.55
Stoneville 213	1.12	.54	186	5.8	5.00
Stoneville 825N ...	1.10	.50	184	4.9	4.90
Deltapine 41	1.12	.54	188	5.3	4.60
Deltapine 55	1.13	.52	174	6.0	4.60
Coker 8304	1.14	.52	198	5.2	4.55
Coker 310	1.14	.54	201	5.2	4.35
Acala SJ-5	1.15	.56	240	5.4	4.20
Paymaster 303	1.04	.48	184	5.4	4.30

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
DES 56	1.17	84.0	23.0	71.8	11.2
Deltapine 61	1.16	84.5	21.0	72.8	11.3
McNair 235	1.14	84.0	24.5	72.2	10.7
Stoneville 213	1.14	83.5	24.0	68.2	11.3
Stoneville 825N ...	1.16	84.0	25.0	73.5	10.5
Deltapine 41	1.12	83.5	23.0	72.0	11.3
Deltapine 55	1.17	83.0	23.5	73.2	10.9
Coker 8304	1.17	83.5	24.5	72.2	11.1
Coker 310	1.18	84.5	22.0	71.0	10.5
Acala SJ-5	1.13	84.5	26.5	73.0	11.0
Paymaster 303	1.06	82.0	23.5	66.5	10.9

Table 46. Delta test: Seed data for Stoneville, Miss.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
DES 56	18.5	3.32	0.72	9.8	4.5
Deltapine 61	18.2	3.25	.60	16.3	4.5
McNair 235	17.8	3.37	.69	15.0	5.0
Stoneville 213	16.4	3.30	.65	17.7	3.5
Stoneville 825N ...	17.8	3.22	.69	17.4	4.0
Deltapine 41	16.7	3.47	.66	15.4	4.5
Deltapine 55	17.1	3.40	.74	16.9	4.0
Coker 8304	20.1	3.28	.79	16.1	3.0
Coker 310	19.1	3.49	.72	15.2	4.0
Acala SJ-5	19.1	3.62	.49	13.6	4.0
Paymaster 303	18.8	3.55	.55	13.8	4.0

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
DES 56	92.5	107.0	0.966	3.5	8.9
Deltapine 61	98.3	111.8	.923	1.0	9.1
McNair 235	96.1	110.1	.931	3.3	8.9
Stoneville 213	95.1	109.3	.902	3.5	8.6
Stoneville 825N ...	96.4	110.4	.926	2.8	9.2
Deltapine 41	79.7	97.2	.917	1.8	7.3
Deltapine 55	88.6	104.3	.935	2.3	8.3
Coker 8304	94.9	109.2	.984	.5	9.3
Coker 310	99.1	112.4	.952	1.3	9.4
Acala SJ-5	110.4	120.7	.923	5.0	10.1
Paymaster 303	112.3	122.1	.913	4.5	10.3

Table 47. Delta test: Yield, boll and yarn tenacity data for Ridgely, Tenn.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	770 a	5.20	37.6	10.9	146
Stoneville 825N ...	762 ab	5.20	36.4	10.5	170
Coker 310	729 abc	3.70	35.6	12.6	168
Deltapine 41	728 abc	3.96	39.7	10.1	166
McNair 235	726 abc	3.07	37.0	11.5	168
DES 56	712 abc	3.27	36.8	11.2	153
Deltapine 55	711 abc	5.38	35.4	10.4	154
Coker 8304	661 bcd	5.61	36.9	11.8	158
Deltapine 61	636 cd	5.20	35.4	10.6	153
Paymaster 303	607 d	6.15	35.8	12.4	154
Acala SJ-5	591 d	4.04	35.4	13.4	192

Table 48. Delta test: Fiber data for Ridgely, Tenn.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 213	1.10	0.52	188	6.1	5.15
Stoneville 825N ...	1.08	.50	192	5.0	5.20
Coker 310	1.14	.54	202	5.6	5.00
Deltapine 41	1.13	.54	206	6.0	4.95
McNair 235	1.10	.50	204	5.4	5.00
DES 56	1.11	.53	203	6.0	5.00
Deltapine 55	1.10	.50	200	6.0	4.95
Coker 8304	1.12	.52	210	5.7	4.80
Deltapine 61	1.11	.52	222	7.6	5.25
Paymaster 303	1.06	.50	198	5.7	4.70
Acala SJ-5	1.13	.54	256	5.8	4.65

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Stoneville 213	1.11	83.5	24.0	72.0	11.2
Stoneville 825N ...	1.14	84.5	25.0	70.0	11.3
Coker 310	1.16	85.0	25.5	72.8	11.4
Deltapine 41	1.18	85.5	26.0	70.0	11.4
McNair 235	1.18	85.5	26.0	75.0	11.7
DES 56	1.16	85.5	25.5	72.5	11.4
Deltapine 55	1.18	84.0	24.0	73.0	11.0
Coker 8304	1.19	86.0	25.5	69.5	11.2
Deltapine 61	1.14	84.5	25.0	73.2	10.5
Paymaster 303	1.07	82.5	24.5	73.2	11.8
Acala SJ-5	1.13	84.5	31.5	69.0	11.7

Table 49. Delta test: Seed data for Ridgely, Tenn.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 213	16.6	3.36	0.52	13.6	3.0
Stoneville 825N ...	16.9	3.33	.47	12.5	4.0
Coker 310	19.0	3.60	.63	12.1	3.5
Deltapine 41	16.9	3.54	.54	11.4	4.5
McNair 235	18.9	3.37	.60	11.6	4.5
DES 56	18.1	3.43	.58	11.4	4.5
Deltapine 55	17.3	3.44	.61	11.2	5.0
Coker 8304	18.5	3.49	.64	10.9	4.0
Deltapine 61	18.0	3.37	.47	11.9	4.5
Paymaster 303	18.9	3.51	.49	11.7	4.0
Acalá SJ-5	18.3	3.43	.45	11.2	3.0

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Stoneville 213	95.5	109.6	0.942	1.8	9.0
Stoneville 825N ...	95.8	109.9	.933	2.3	9.0
Coker 310	110.0	120.4	.984	1.3	10.3
Deltapine 41	92.2	107.1	.924	.8	8.5
McNair 235	100.4	113.3	.951	1.8	9.5
DES 56	98.9	112.2	.935	1.5	9.5
Deltapine 55	92.3	107.2	.948	.8	8.7
Coker 8304	100.8	113.6	.984	1.5	9.9
Deltapine 61	94.4	108.8	.955	2.3	9.3
Paymaster 303	113.4	123.3	.957	3.0	10.7
Acala SJ-5	115.3	124.3	.971	4.3	10.7

Table 50. Delta test: Yield, boll and yarn tenacity data for Tunica, Miss.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 825N ...	662 a	4.58	40.1	10.2	130
Stoneville 213	627 ab	4.85	39.6	10.2	131
DES 56	609 abc	4.64	39.4	10.1	135
Deltapine 61	585 abc	5.09	38.8	10.4	142
Coker 8304	560 abc	5.40	38.3	11.4	147
Deltapine 41	559 abc	4.48	42.2	9.3	144
Deltapine 55	552 abc	4.74	41.3	9.3	136
Coker 310	527 bc	5.66	37.6	10.6	148
McNair 235	494 cd	4.72	39.3	9.9	139
Acala SJ-5	404 de	5.90	38.6	12.2	176
Paymaster 303	382 e	5.14	38.1	11.7	133

Table 51. Delta test: Fiber data for Tunica, Miss.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 825N ...	1.06	0.49	174	5.0	5.15
Stoneville 213	1.06	.49	186	5.8	5.00
DES 56	1.06	.50	187	5.4	5.00
Deltapine 61	1.08	.50	190	6.0	5.30
Coker 8304	1.08	.50	190	5.5	4.80
Deltapine 41	1.06	.50	182	5.1	5.00
Deltapine 55	1.06	.47	180	5.2	4.90
Coker 310	1.10	.52	193	5.3	4.45
McNair 235	1.04	.50	179	4.9	4.95
Acala SJ-5	1.10	.55	228	5.1	4.80
Paymaster 303	1.02	.48	170	5.0	4.65

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Stoneville 825N ...	1.07	83.0	21.5	65.0	7.4
Stoneville 213	1.10	84.0	22.0	64.8	9.1
DES 56	1.04	83.0	22.0	64.8	8.6
Deltapine 61	1.08	84.0	22.0	66.8	9.0
Coker 8304	1.11	83.5	21.5	66.2	9.2
Deltapine 41	1.07	83.0	22.0	69.8	8.8
Deltapine 55	1.07	83.0	20.5	67.2	8.3
Coker 310	1.14	85.0	23.0	65.8	8.7
McNair 235	1.06	83.0	21.5	65.0	9.3
Acala SJ-5	1.12	85.0	26.5	69.5	8.2
Paymaster 303	1.02	83.5	21.0	64.0	9.0

Table 52. Delta test: Seed data for Tunica, Miss.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 825N ...	16.6	3.62	0.61	15.7	4.0
Stoneville 213	16.1	3.63	.71	16.0	3.0
DES 56	17.4	3.72	.60	15.0	5.0
Deltapine 61	17.6	3.80	.60	13.4	5.0
Coker 8304	18.5	3.77	.61	12.7	4.5
Deltapine 41	16.2	3.77	.64	15.3	5.0
Deltapine 55	16.1	3.74	.58	15.4	5.0
Coker 310	17.8	3.78	.65	14.8	4.0
McNair 235	17.8	3.79	.66	13.3	4.5
Acala SJ-5	18.4	3.80	.48	12.4	4.0
Paymaster 303	18.0	3.77	.58	14.2	3.5

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Stoneville 825N ...	95.3	109.5	0.903	4.0	8.6
Stoneville 213	92.2	107.1	.883	1.5	8.1
DES 56	92.0	106.9	.942	1.8	8.7
Deltapine 61	99.0	112.3	.919	1.3	9.1
Coker 8304	105.5	117.2	.960	2.0	10.1
Deltapine 41	85.8	102.1	.899	1.8	7.7
Deltapine 55	89.2	104.8	.909	.5	8.1
Coker 310	102.5	115.0	.959	1.3	9.8
McNair 235	91.2	106.3	.914	1.8	8.8
Acala SJ-5	114.7	123.9	.943	1.0	10.8
Paymaster 303	105.9	117.5	.926	3.8	9.8

Table 53. Delta test: Yield, boll and yarn tenacity data for Clarkedale, Ark.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
DES 56	496 a	NA	36.1	11.1	147
McNair 235	445 ab	NA	35.8	11.6	164
Deltapine 61	393 abc	NA	35.8	11.4	150
Deltapine 41	391 abc	NA	39.9	10.2	160
Coker 8304	324 bcd	NA	34.2	12.2	153
Coker 310	321 bcd	NA	36.1	11.9	167
Deltapine 55	314 bcd	NA	38.5	10.6	156
Stoneville 213	269 cd	NA	35.2	11.7	138
Paymaster 303	237 d	NA	33.9	14.2	148
Stoneville 825N ...	233 d	NA	35.2	12.0	150
Acala SJ-5	226 d	NA	35.3	13.6	192

NA, Data not available.

Table 54. Delta test: Fiber data for Clarkedale, Ark.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
DES 56	1.13	0.52	190	5.8	4.65
McNair 235	1.17	.56	198	5.4	4.80
Deltapine 61	1.18	.56	200	6.8	5.05
Deltapine 41	1.16	.54	202	5.6	5.10
Coker 8304	1.14	.51	193	5.4	4.75
Coker 310	1.18	.54	200	5.4	4.70
Deltapine 55	1.14	.53	184	5.9	4.90
Stoneville 213	1.16	.54	182	6.4	5.00
Paymaster 303	1.08	.51	186	5.4	4.65
Stoneville 825N ...	1.17	.54	188	4.9	5.00
Acala SJ-5	1.20	.60	242	5.6	4.60

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
DES 56	1.17	83.5	22.5	70.0	9.4
McNair 235	1.21	85.5	23.0	69.8	9.7
Deltapine 61	1.24	84.5	22.5	71.5	10.1
Deltapine 41	1.20	85.0	22.0	68.2	10.0
Coker 8304	1.15	84.0	24.0	64.5	9.7
Coker 310	1.23	84.5	23.5	70.0	9.4
Deltapine 55	1.18	84.0	22.5	70.0	10.1
Stoneville 213	1.19	84.5	23.5	69.5	10.1
Paymaster 303	1.11	84.0	24.0	66.5	9.3
Stoneville 825N ...	1.20	85.0	21.5	72.8	9.0
Acala SJ-5	1.23	85.5	28.0	72.0	8.8

Table 55. Delta test: Seed data for Clarkedale, Ark.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
DES 56	20.8	3.19	0.88	10.2	4.5
McNair 235	20.4	3.19	.78	10.4	4.5
Deltapine 61	18.4	3.20	.64	11.6	5.0
Deltapine 41	17.4	3.31	.72	10.7	5.0
Coker 8304	19.7	3.52	.74	11.3	4.5
Coker 310	20.6	3.15	.78	13.0	4.0
Deltapine 55	18.3	3.32	.77	10.6	5.0
Stoneville 213	19.3	3.21	.80	10.1	4.0
Paymaster 303	20.2	3.53	.59	18.2	4.5
Stoneville 825N ...	18.8	3.30	.86	12.2	4.0
Acala SJ-5	20.6	3.52	.60	9.6	4.0

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
DES 56	105.5	117.1	0.939	1.8	9.9
McNair 235	113.6	123.1	.915	2.8	10.4
Deltapine 61	107.6	118.7	.919	2.5	9.9
Deltapine 41	99.8	112.9	.912	1.3	9.1
Coker 8304	113.1	122.7	.952	1.5	10.8
Coker 310	107.6	118.7	.962	1.0	10.6
Deltapine 55	100.8	113.7	.934	1.5	9.7
Stoneville 213	122.4	129.2	.925	1.0	11.3
Paymaster 303	120.0	127.5	.972	2.3	11.6
Stoneville 825N ...	114.2	123.5	.922	4.3	10.5
Acala SJ-5	124.6	131.0	.984	1.5	12.5

Table 56. Central test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 220	809 a	5.04 ab	36.8 bc	10.1 bc	151 b
Stoneville 825N ...	789 ab	4.95 b	37.1 b	10.0 cd	135 d
McNair 235	785 ab	4.98 b	37.1 b	9.8 cde	152 b
Deltapine 55	761 ab	4.48 c	38.7 a	9.5 de	145 bc
Deltapine 61	745 ab	4.97 b	37.1 b	9.3 e	145 bc
Stoneville 256	732 ab	5.03 ab	37.5 b	9.8 cde	137 cd
Stoneville 213	711 b	4.63 c	37.2 b	10.1 bc	140 cd
Coker 310	705 b	5.12 ab	36.0 cd	10.5 b	153 b
Paymaster 303	580 c	5.26 ab	35.0 e	11.2 a	135 d
Acala SJ-5	518 c	5.34 a	35.5 de	11.6 a	188 a

Table 57. Central test: Fiber data by cotton variety

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
McNair 220	1.05 b	0.50 bc	200 b	5.4 cd	4.44 bc
Stoneville 825N ...	1.06 b	.49 cd	179 e	5.1 de	5.04 a
McNair 235	1.07 b	.50 bc	198 b	5.4 cd	4.41 bc
Deltapine 55	1.07 b	.50 bc	182 de	5.5 c	4.60 b
Deltapine 61	1.07 b	.52 bc	196 bc	6.6 a	4.91 a
Stoneville 256	1.07 b	.50 bc	177 e	4.9 e	4.96 a
Stoneville 213	1.06 b	.51 bc	188 bcde	5.9 b	4.89 a
Coker 310	1.10 a	.52 b	192 bcd	5.4 cd	4.42 bc
Paymaster 303	1.02 c	.48 d	184 cde	5.4 cd	4.21 c
Acala SJ-5	1.12 a	.56 a	236 a	5.3 cd	4.49 bc

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
McNair 220	1.08 bc	83.6 b	23.2 b	66.6 bcd	10.9 a
Stoneville 825N ...	1.08 bc	83.5 b	21.8 bc	68.9 ab	10.6 a
McNair 235	1.09 abc	84.4 ab	23.0 b	66.8 bcd	10.9 a
Deltapine 55	1.07 c	83.4 b	22.5 bc	68.7 abc	10.7 a
Deltapine 61	1.09 abc	84.0 b	21.8 bc	68.3 abcd	11.1 a
Stoneville 256	1.10 abc	83.9 b	21.1 c	68.4 abcd	10.4 a
Stoneville 213	1.08 bc	84.2 ab	22.4 bc	66.0 d	11.1 a
Coker 310	1.12 ab	83.5 b	23.1 b	67.8 abcd	11.1 a
Paymaster 303	1.02 d	82.0 c	21.6 bc	66.1 cd	11.0 a
Acala SJ-5	1.13 a	85.2 a	27.0 a	69.6 a	10.6 a

Table 58. Central test: Seed data by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
McNair 220	18.7 ab	3.29 b	0.78 a	12.3 cd	5.6 a
Stoneville 825N ...	17.9 cd	3.25 b	.84 a	15.0 a	5.3 ab
McNair 235	18.4 bc	3.29 b	.83 a	12.5 c	5.5 a
Deltapine 55	17.9 cd	3.29 b	.81 a	12.3 cd	5.4 a
Deltapine 61	18.3 bc	3.15 b	.83 a	13.7 b	5.4 a
Stoneville 256	17.6 de	3.37 ab	.83 a	13.0 bc	5.1 abc
Stoneville 213	17.2 e	3.37 ab	.93 a	15.2 a	4.3 d
Coker 310	18.8 ab	3.30 b	.72 a	13.2 bc	4.6 cd
Paymaster 303	18.7 ab	3.34 ab	.71 a	13.0 bc	4.8 bcd
Acala SJ-5	19.2 a	3.54 a	.51 b	11.5 d	4.4 d

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
McNair 220	102.7 b	115.6 b	0.880 bcd	2.4 a	9.1 cd
Stoneville 825N ...	97.2 c	110.9 c	.896 abc	1.9 a	8.7 def
McNair 235	103.3 b	115.5 b	.858 d	2.6 a	8.9 cde
Deltapine 55	92.1 c	107.0 c	.877 cd	1.4 a	8.1 g
Deltapine 61	95.5 c	109.6 c	.879 bcd	1.3 a	8.3 fg
Stoneville 256	94.3 c	108.7 c	.905 ab	2.5 a	8.6 ef
Stoneville 213	95.4 c	109.5 c	.891 abc	1.6 a	8.6 ef
Coker 310	102.0 b	114.6 b	.904 ab	1.5 a	9.2 c
Paymaster 303	110.4 a	120.7 a	.902 abc	2.6 a	10.0 b
Acala SJ-5	114.9 a	124.0 a	.912 a	3.0 a	10.5 a

Table 59. Central test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Bossier City, La. .	1146 a	4.94 ab	39.9 a	10.6 a	145 b
College Station, Tex.	957 b	4.68 b	37.5 b	10.3 a	156 a
Weslaco, Tex.	565 c	5.03 ab	32.2 c	10.9 a	153 a
Nueces County, Tex.	185 d	5.27 a	37.5 b	8.9 b	138 c

Table 60. Central test: Fiber data by test location

Location	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Bossier City, La.	1.11 a	0.51 b	200 a	5.6 ab	5.05 a
College Station, Tex.	1.10 a	.52 a	196 b	5.4 bc	4.64 b
Weslaco, Tex.	1.08 a	.52 a	198 ab	5.7 a	4.55 b
Nueces County, Tex.	1.00 b	.47 c	177 c	5.3 c	4.30 c

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Bossier City, La.	1.14 a	83.8 b	23.0 ab	69.0 b	10.7 b
College Station, Tex.	1.11 a	84.2 ab	24.0 a	66.0 c	11.5 a
Weslaco, Tex.	1.08 a	84.3 a	22.4 ab	71.1 a	11.1 ab
Nueces County, Tex.	1.01 b	82.8 c	21.6 b	64.7 c	10.1 c

Table 61. Central test: Seed data by test location

Location	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Bossier City, La.	18.8 a	3.53 a	1.07 a	11.8 c	5.7 a
College Station, Tex.	18.9 a	3.16 c	.83 b	13.6 ab	5.2 b
Weslaco, Tex.	18.0 b	3.33 b	.65 c	14.0 a	4.1 c
Nueces County, Tex.	17.3 c	3.26 bc	.57 c	13.3 b	5.2 b

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Bossier City, La.	99.4 b	112.7 b	0.946 a	1.2 b	9.4 a
College Station, Tex.	99.8 b	112.8 b	.906 b	2.1 ab	9.1 b
Weslaco, Tex.	106.8 a	118.0 a	.900 b	3.0 a	9.6 a
Nueces County, Tex.	97.2 b	110.9 b	.809 c	2.0 ab	7.9 c

Table 62. Central test: Yield, boll and yarn tenacity data for Bossier City, La.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 825N ...	1294 a	4.88	40.1	10.8	126
McNair 220	1285 a	4.59	39.6	10.4	150
Deltapine 61	1268 a	4.85	40.5	9.6	140
Stoneville 213	1245 a	4.93	40.4	10.6	136
Deltapine 55	1205 a	4.90	41.8	10.0	142
McNair 235	1165 ab	4.48	40.2	10.1	153
Stoneville 256	1136 ab	4.75	40.3	10.5	130
Coker 310	1007 bc	5.35	38.9	11.2	158
Paymaster 303	963 c	5.34	39.7	11.4	140
Acala SJ-5	901 c	5.35	37.8	12.5	178

Table 63. Central test: Fiber data for Bossier City, La.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 825N ...	1.10	0.48	192	5.2	5.55
McNair 220	1.10	.52	204	5.6	4.95
Deltapine 61	1.10	.50	198	7.0	5.25
Stoneville 213	1.10	.51	181	5.7	5.40
Deltapine 55	1.12	.52	194	5.9	5.10
McNair 235	1.12	.52	206	5.4	4.70
Stoneville 256	1.10	.48	184	4.8	5.20
Coker 310	1.16	.56	204	5.4	4.90
Paymaster 303	1.02	.48	198	5.4	4.75
Acala SJ-5	1.16	.56	244	5.4	4.70

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Stoneville 825N ...	1.14	83.5	23.0	69.2	10.5
McNair 220	1.14	83.5	22.5	69.0	10.6
Deltapine 61	1.16	83.5	22.5	67.3	10.3
Stoneville 213	1.16	85.0	23.5	66.8	11.4
Deltapine 55	1.14	83.5	22.5	70.8	10.6
McNair 235	1.16	84.5	24.0	70.0	10.9
Stoneville 256	1.14	83.5	20.5	70.2	10.0
Coker 310	1.20	84.0	24.0	69.8	11.1
Paymaster 303	.98	82.0	20.5	65.2	10.9
Acala SJ-5	1.20	85.5	26.5	72.0	10.7

Table 64. Central test: Seed data for Bossier City, La.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 825N ...	18.6	3.44	1.01	13.4	5.5
McNair 220	19.5	3.47	1.31	11.5	6.0
Deltapine 61	18.9	3.41	1.40	11.7	6.0
Stoneville 213	17.6	3.51	1.36	13.2	5.0
Deltapine 55	18.5	3.49	.88	11.6	5.5
McNair 235	19.2	3.51	1.43	11.0	6.0
Stoneville 256	17.9	3.48	.92	12.4	5.5
Coker 310	19.6	3.59	.88	11.8	5.5
Paymaster 303	18.8	3.66	1.09	10.8	6.0
Acala SJ-5	19.9	3.70	.40	10.3	5.5

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Stoneville 825N ...	97.9	111.5	0.954	1.3	9.4
McNair 220	96.7	112.6	.949	1.0	9.2
Deltapine 61	95.3	109.5	.933	.3	8.7
Stoneville 213	94.1	108.6	.938	.8	9.1
Deltapine 55	91.4	106.4	.935	1.8	8.5
McNair 235	99.0	112.3	.930	.5	9.2
Stoneville 256	92.2	107.1	.945	2.0	9.0
Coker 310	104.2	116.2	.963	.5	10.0
Paymaster 303	108.1	119.1	.941	1.8	10.2
Acala SJ-5	115.5	124.4	.975	2.5	11.3

Table 65. Central test: Yield, boll and yarn tenacity data for College Station, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Coker 310	1098 a	4.94	36.9	10.3	162
Stoneville 825N ...	1079 a	4.52	37.8	9.9	142
McNair 220	1075 a	4.48	38.3	10.4	162
Stoneville 256	1074 a	4.66	38.1	9.7	143
McNair 235	1054 a	4.41	38.7	9.9	158
Deltapine 55	963 ab	4.56	39.5	9.0	145
Deltapine 61	946 ab	4.48	38.0	9.4	148
Stoneville 213	924 ab	4.73	37.3	10.1	146
Paymaster 303	742 bc	5.02	35.1	12.0	148
Acala SJ-5	618 c	5.06	35.6	12.4	206

Table 66. Central test: Fiber data for College Station, Tex.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Coker 310	1.12	0.54	200	5.1	4.50
Stoneville 825N ...	1.10	.51	182	5.2	4.70
McNair 220	1.08	.52	204	5.3	4.65
Stoneville 256	1.10	.50	179	5.0	4.95
McNair 235	1.09	.52	208	5.5	4.50
Deltapine 55	1.10	.52	172	5.6	4.40
Deltapine 61	1.09	.53	192	6.4	4.80
Stoneville 213	1.10	.52	186	6.0	4.80
Paymaster 303	1.07	.50	187	4.8	4.50
Acala SJ-5	1.17	.59	246	5.0	4.65

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Coker 310	1.12	83.5	24.0	66.2	11.4
Stoneville 825N ...	1.11	84.0	22.5	67.5	11.7
McNair 220	1.11	84.0	24.5	65.8	11.5
Stoneville 256	1.15	85.5	22.0	65.8	12.1
McNair 235	1.10	85.5	24.0	65.2	11.4
Deltapine 55	1.11	83.0	23.0	66.2	11.5
Deltapine 61	1.10	84.0	22.0	68.8	12.2
Stoneville 213	1.09	84.0	24.0	65.5	11.8
Paymaster 303	1.07	83.0	24.0	62.0	11.3
Acala SJ-5	1.15	85.0	30.5	67.0	10.1

Table 67. Central test: Seed data for College Station, Tex.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Coker 310	19.5	2.95	0.92	13.1	5.0
Stoneville 825N ...	18.3	3.05	.98	14.7	6.0
McNair 220	19.6	3.15	.73	12.7	5.5
Stoneville 256	18.9	3.42	1.03	14.6	5.0
McNair 235	19.2	3.09	.74	12.9	5.5
Deltapine 55	18.5	3.14	.92	12.0	5.5
Deltapine 61	18.7	2.88	.68	14.9	5.5
Stoneville 213	17.3	3.48	.95	15.2	4.5
Paymaster 303	19.6	3.12	.71	13.7	5.0
Acala SJ-5	19.3	3.35	.61	12.2	4.0

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Coker 310	96.4	110.3	0.939	1.0	9.1
Stoneville 825N ...	92.8	107.5	.899	3.3	8.3
McNair 220	101.8	114.4	.904	2.5	9.4
Stoneville 256	92.7	107.5	.914	2.8	8.5
McNair 235	104.4	116.3	.858	2.8	9.0
Deltapine 55	89.5	105.0	.907	1.8	8.1
Deltapine 61	89.0	104.6	.903	2.0	8.0
Stoneville 213	95.2	109.4	.909	2.5	8.6
Paymaster 303	117.4	125.9	.900	.8	10.6
Acala SJ-5	118.7	126.8	.926	1.8	11.0

Table 68. Central test: Yield, boll and yarn tenacity data for Weslaco, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 235	721 a	4.87	32.3	10.5	156
McNair 220	689 ab	5.03	31.9	10.9	151
Deltapine 55	673 abc	4.61	33.2	9.7	156
Stoneville 825N ...	593 bcd	4.68	32.7	10.5	141
Deltapine 61	580 cd	5.01	32.2	10.0	156
Stoneville 256	539 de	4.78	32.8	10.7	142
Coker 310	527 de	5.56	30.8	11.6	162
Stoneville 213	505 de	4.59	34.1	11.2	144
Paymaster 303	444 ef	5.68	29.8	12.0	138
Acala SJ-5	379 f	5.49	33.0	11.6	186

Table 69. Central test: Fiber data for Weslaco, Tex.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
McNair 235	1.08	0.51	197	5.4	4.50
McNair 220	1.06	.50	205	5.4	4.25
Deltapine 55	1.10	.52	198	5.4	4.55
Stoneville 825N ...	1.06	.51	182	5.4	5.15
Deltapine 61	1.08	.54	201	6.4	4.90
Stoneville 256	1.09	.52	190	5.3	4.95
Coker 310	1.12	.54	196	5.8	4.20
Stoneville 213	1.07	.51	197	6.2	4.75
Paymaster 303	1.04	.48	186	5.9	3.75
Acala SJ-5	1.10	.58	231	5.6	4.50

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
McNair 235	1.09	84.5	23.0	69.0	11.5
McNair 220	1.08	84.0	23.5	71.0	12.0
Deltapine 55	1.06	84.0	22.5	71.5	11.0
Stoneville 825N ...	1.08	84.0	21.5	73.2	10.6
Deltapine 61	1.09	86.0	21.0	73.2	10.5
Stoneville 256	1.08	83.5	22.5	71.0	10.4
Coker 310	1.16	85.0	23.0	70.8	11.3
Stoneville 213	1.06	84.0	21.0	68.2	11.3
Paymaster 303	1.04	81.5	21.5	71.2	10.8
Acala SJ-5	1.12	86.5	25.0	72.0	11.3

Table 70. Central test: Seed data for Weslaco, Tex.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
McNair 235	18.0	3.32	0.64	12.8	5.0
McNair 220	18.0	3.32	.61	12.7	5.0
Deltapine 55	17.7	3.29	.78	13.7	4.0
Stoneville 825N ...	18.0	3.33	.73	16.7	4.0
Deltapine 61	18.1	3.23	.59	14.6	4.0
Stoneville 256	17.1	3.35	.75	13.3	5.0
Coker 310	18.7	3.27	.62	14.6	3.0
Stoneville 213	17.1	3.22	.74	17.0	3.5
Paymaster 303	18.6	3.40	.52	13.8	4.0
Acala SJ-5	19.0	3.60	.49	11.2	3.5

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
McNair 235	110.7	120.8	0.858	2.5	9.5
McNair 220	111.5	121.5	.880	3.0	9.8
Deltapine 55	95.9	109.9	.901	1.5	8.6
Stoneville 825N ...	103.6	115.7	.920	2.3	9.5
Deltapine 61	99.6	112.8	.902	2.3	9.0
Stoneville 256	101.8	114.4	.911	2.8	9.3
Coker 310	110.9	121.2	.913	2.5	10.1
Stoneville 213	99.0	112.3	.904	1.5	8.9
Paymaster 303	115.7	124.6	.912	4.8	10.5
Acala SJ-5	119.2	127.2	.905	6.8	10.8

Table 71. Central test: Yield, boll and yarn tenacity data for Nueces County, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 55	203 a	3.86	40.2	9.3	138
McNair 235	200 a	6.15	37.4	8.9	141
Stoneville 825N ...	189 a	5.72	37.8	8.7	132
McNair 220	188 a	6.08	37.4	8.6	142
Coker 310	187 a	4.62	37.7	8.9	130
Deltapine 61	185 a	5.55	37.9	8.4	138
Stoneville 256	181 a	5.95	38.9	8.6	132
Acala SJ-5	175 a	5.46	35.6	10.0	182
Paymaster 303	173 a	5.01	35.6	9.6	114
Stoneville 213	169 a	4.27	37.0	8.7	132

Table 72. Central test: Fiber data for Nueces County, Tex.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 55	0.98	0.46	161	5.2	4.35
McNair 235	1.00	.47	179	5.2	3.95
Stoneville 825N ...	1.00	.48	157	4.8	4.75
McNair 220	.97	.45	184	5.0	3.90
Coker 310	1.00	.46	168	5.2	4.10
Deltapine 61	1.00	.48	195	6.5	4.70
Stoneville 256	1.00	.48	156	4.6	4.75
Acala SJ-5	1.05	.53	222	5.2	4.10
Paymaster 303	.96	.44	166	5.4	3.85
Stoneville 213	1.00	.48	186	5.6	4.60

Variety	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Deltapine 55	0.98	83.0	22.0	66.2	9.8
McNair 235	1.00	83.0	21.0	62.8	9.9
Stoneville 825N ...	1.00	82.5	20.0	65.5	9.5
McNair 220	1.00	83.0	22.5	60.5	9.6
Coker 310	1.00	81.5	21.5	64.5	10.6
Deltapine 61	1.01	82.5	21.5	64.0	11.4
Stoneville 256	1.04	83.0	19.5	66.5	9.3
Acala SJ-5	1.04	84.0	26.0	67.5	10.3
Paymaster 303	.98	81.5	20.5	66.0	10.9
Stoneville 213	1.02	84.0	21.0	63.5	9.9

Table 73. Central test: Seed data for Nueces County, Tex.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 55	17.0	3.25	0.65	12.1	6.5
McNair 235	17.4	3.24	.52	13.1	5.5
Stoneville 825N ...	17.0	3.18	.65	15.3	5.5
McNair 220	17.5	3.23	.47	12.2	6.0
Coker 310	17.4	3.40	.47	13.1	5.0
Deltapine 61	17.7	3.09	.65	13.5	6.0
Stoneville 256	16.6	3.25	.64	11.8	5.0
Acala SJ-5	18.6	3.50	.53	12.3	4.5
Paymaster 303	17.8	3.21	.52	13.9	4.0
Stoneville 213	16.8	3.29	.66	15.3	4.0

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Deltapine 55	91.9	106.8	0.764	0.6	7.0
McNair 235	99.2	112.5	.788	4.5	7.8
Stoneville 825N ...	94.6	108.9	.813	.8	7.6
McNair 220	101.1	113.9	.788	3.1	8.0
Coker 310	96.4	110.7	.801	2.0	7.7
Deltapine 61	98.1	111.6	.780	.8	7.6
Stoneville 256	90.6	105.8	.851	2.3	7.7
Acala SJ-5	106.2	117.7	.841	1.0	8.9
Paymaster 303	100.6	113.5	.855	3.3	8.6
Stoneville 213	93.2	107.9	.814	1.7	7.6

Table 74. Plains test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Pioneer Brand 1140	560 a	5.61 bc	34.8 bcd	11.3 ghi	144 cde
Stoneville 213	544 ab	4.84 f	34.4 bcde	10.6 j	135 efg
Tamcot Sp-21S	539 ab	5.16 ef	35.2 ab	10.6 j	134 fgh
Westburn M	527 abc	5.59 bcd	35.0 bc	11.5 fghi	128 gh
Lockett 77	511 bcd	5.33 cde	35.4 ab	11.3 ghi	141 def
Coker 310	487 cde	5.29 cde	34.3 bcde	11.2 ghij	149 cd
Deltapine SR-2	484 def	5.23 de	33.2 fg	11.1 hij	145 cd
GSA 71	482 defg	5.47 cde	33.6 efg	12.2 cde	130 gh
Tamcot 788	477 defg	5.47 cde	34.3 bcde	11.7 defgh	160 b
Coker 5110	476 defg	5.30 cde	34.0 cdef	11.8 defg	146 cd
Paymaster 303	471 defg	5.38 cde	34.3 bcde	12.3 cd	134 fg
Stripper 31A	455 efg	4.86 f	32.9 g	10.9 ij	110 i
Western 44	447 efgh	5.24 de	33.8 defg	11.5 fghi	142 cdef
Dunn 119	446 efgh	5.83 b	32.9 g	14.4 a	162 b
Paymaster 785	439 fgh	5.17 ef	36.2 a	11.6 efgh	125 h
Lankart LX 571	437 gh	6.29 a	35.1 bc	13.3 b	128 gh
Paymaster 266	408 h	5.17 ef	33.2 fg	12.1 cdef	151 c
Acala SJ-5	353 i	5.55 bcd	34.9 bcd	12.7 c	176 a

Table 75. Plains test: Fiber data by cotton variety

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Pioneer Brand 1140	1.05 ef	0.50 cde	197 defg	6.2 cde	4.50 cde
Stoneville 213	1.08 cd	.50 cd	193 efgh	6.6 bc	4.63 c
Tamcot Sp-21S	1.06 de	.49 cdefg	182 ghi	7.5 a	4.03 g
Westburn M	1.02 fgh	.47 h	184 ghi	7.2 a	4.54 cd
Lockett 77	1.02 fgh	.47 h	188 fghi	6.1 def	4.25 efg
Coker 310	1.10 bc	.50 cdef	210 bc	5.8 fg	4.60 c
Deltapine SR-2	1.05 ef	.49 defgh	201 cdef	6.0 ef	4.77 c
GSA 71	1.00 h	.48 efgh	188 fghi	6.6 bc	4.72 c
Tamcot 788	1.05 de	.48 defgh	204 cde	5.5 g	4.10 fg
Coker 5110	1.11 ab	.51 c	197 defg	6.1 ef	4.52 cde
Paymaster 303	1.02 fgh	.48 fgh	191 efgh	5.7 fg	4.60 c
Stripper 31A	.92 i	.45 i	174 i	6.0 ef	5.69 a
Western 44	1.00 h	.48 gh	190 fgh	6.3 cde	4.31 def
Dunn 119	1.10 b	.53 b	220 ab	5.7 fg	4.66 c
Paymaster 785	.94 i	.47 h	182 ghi	6.6 bcd	5.13 b
Lankart LX 571	1.04 efg	.50 cdef	179 hi	6.8 b	4.74 c
Paymaster 266	1.00 h	.51 c	208 bcd	6.6 bc	4.67 c
Acala SJ-5	1.13 a	.55 a	229 a	6.0 ef	4.19 fg

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Pioneer Brand 1140	1.07 c	83.0 bcd	24.1 bcd	71.2 a	10.4 de
Stoneville 213	1.10 b	83.2 abc	23.7 bcde	71.2 ab	11.1 abc
Tamcot Sp-21S	1.06 cde	81.4 e	22.2 efg	72.0 a	10.9 abcde
Westburn M	1.03 defg	82.0 de	22.8 cdefg	70.6 ab	11.3 ab
Lockett 77	1.03 efg	82.1 de	22.2 efg	69.4 ab	10.4 de
Coker 310	1.13 a	82.7 bcd	23.5 bcde	71.8 a	10.9 abcde
Deltapine SR-2	1.07 c	83.2 abc	23.8 bcde	68.6 b	10.9 abcde
GSA 71	1.01 ghi	82.9 bcd	21.8 fg	68.4 b	10.6 bcde
Tamcot 788	1.06 cd	82.1 de	24.8 b	71.0 ab	10.7 bcde
Coker 5110	1.14 a	82.9 bcd	24.6 b	69.8 ab	11.1 abc
Paymaster 303	1.02 fgh	82.0 de	23.2 bcdef	70.0 ab	11.2 abc
Stripper 31A	.91 j	82.4 cd	21.5 g	69.8 ab	10.5 cde
Western 44	.99 i	82.2 cde	22.6 defg	69.8 ab	10.6 bcde
Dunn 119	1.13 a	83.6 ab	27.8 a	69.1 ab	10.2 e
Paymaster 785	.92 j	82.3 cde	22.2 efg	68.3 b	11.5 a
Lankart LX 571	1.04 cdef	83.0 bcd	23.2 bcdef	70.9 ab	11.1 abc
Paymaster 266	1.00 hi	84.1 a	24.3 bc	70.8 ab	10.9 abcd
Acala SJ-5	1.15 a	84.1 a	28.3 a	72.0 a	11.0 abcd

Table 76. Plains test: Seed data by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Pioneer Brand 1140	20.7 a	3.15 fgh	0.62 bcd	11.0 ef	5.0 a
Stoneville 213	17.9 ef	3.04 i	.84 a	13.7 a	3.5 fgh
Tamcot Sp-21S	18.7 cdef	3.37 cd	.51 de	9.5 g	4.8 ab
Westburn M	18.9 cdef	3.44 bc	.65 bcd	10.8 ef	5.0 a
Lockett 77	19.3 abcde	3.36 de	.52 de	12.1 cd	4.3 bcde
Coker 310	18.1 def	3.12 h	.86 a	13.5 ab	3.8 efg
Deltapine SR-2	19.9 abc	3.17 fgh	.54 de	9.4 g	4.8 ab
GSA 71	18.8 cdef	3.38 cd	.57 de	12.1 cd	4.3 bcde
Tamcot 788	19.4 abcd	3.33 de	.53 de	11.3 def	4.3 bcde
Coker 5110	19.8 abc	3.13 gh	.78 ab	12.2 cd	4.2 cde
Paymaster 303	20.4 ab	3.19 fg	.77 abc	11.6 cde	4.5 abcd
Stripper 31A	19.1 bcdef	3.37 cd	.77 abc	11.6 de	4.7 abc
Western 44	19.5 abcd	3.54 a	.58 cde	10.5 f	4.8 ab
Dunn 119	17.7 f	3.30 e	.50 de	13.9 a	3.3 gh
Paymaster 785	18.5 cdef	3.45 b	.52 de	12.0 cd	4.5 abcd
Lankart LX 571	18.6 cdef	3.39 bcd	.41 e	10.8 ef	5.0 a
Paymaster 266	19.1 bcdef	3.21 f	.55 de	11.8 cde	4.0 def
Acala SJ-5	19.3 abcde	3.15 fgh	.54 de	12.7 bc	3.0 h

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Pioneer Brand 1140	104.7 e	116.5 e	1.016 abc	2.8 def	10.6 gh
Stoneville 213	98.5 f	111.9 f	.989 fgh	4.3 cdef	9.7 i
Tamcot Sp-21S	104.1 e	116.1 e	.999 def	5.8 bcd	10.4 h
Westburn M	111.6 c	121.7 c	1.021 ab	2.8 def	11.3 de
Lockett 77	111.5 c	121.6 c	1.016 abc	3.2 cdef	11.4 de
Coker 310	107.0 de	118.3 de	1.009 bcd	2.9 cdef	10.7 gh
Deltapine SR-2	113.8 c	123.2 c	.992 efg	3.7 cdef	11.2 ef
GSA 71	125.1 b	131.2 b	.978 h	5.7 bcd	12.3 c
Tamcot 788	112.3 c	122.1 c	1.020 ab	2.2 ef	11.4 de
Coker 5110	112.8 c	122.5 c	1.009 bcd	1.8 ef	11.2 ef
Paymaster 303	114.7 c	123.9 c	1.004 cde	3.3 cdef	11.4 de
Stripper 31A	108.1 d	119.1 d	1.014 abc	6.1 bc	10.9 fg
Western 44	113.5 c	123.0 c	1.026 a	1.8 f	11.6 d
Dunn 119	140.1 a	141.5 a	.925 j	12.1 a	13.0 b
Paymaster 785	113.9 c	123.3 c	.996 defg	5.6 bcd	11.3 de
Lankart LX 571	140.8 a	142.0 a	.949 i	5.0 bcde	13.4 a
Paymaster 266	115.2 c	124.2 c	.999 def	4.9 bcdef	11.6 d
Acala SJ-5	113.8 c	123.2 c	.983 gh	7.6 b	11.2 ef

Table 77. Plains test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Chickasha (irr.), Okla.	695 a	6.21 a	35.8 a	12.0 ab	138 bc
Altus, Okla.	689 a	6.01 a	33.9 b	12.9 a	144 ab
Lubbock, Tex.	626 a	4.72 b	34.4 b	11.4 b	139 bc
Lamesa, Tex.	207 b	4.27 b	33.5 b	10.3 c	138 c
Mangum, Okla.	127 b	5.67 a	33.5 b	12.3 a	146 a

Table 78. Plains test: Fiber data by test location

Location	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Chickasha (irr.), Okla.	1.04 a	0.50 a	195 bc	5.9 b	4.86 b
Altus, Okla.	1.05 a	.52 a	197 b	6.2 ab	5.10 a
Lubbock, Tex.	1.03 a	.47 b	187 d	6.6 a	4.12 c
Lamesa, Tex.	.98 b	.45 b	190 cd	6.6 a	3.86 d
Mangum, Okla.	1.07 a	.52 a	210 a	6.2 ab	5.01 ab

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	Rd	Hunter's b value
Chickasha (irr.), Okla.	1.07 a	83.7 b	23.1 c	68.2 b	10.1 d
Altus, Okla.	1.06 a	83.8 ab	22.6 c	67.9 b	10.5 c
Lubbock, Tex.	1.04 a	81.1 c	24.6 a	73.7 a	11.3 b
Lamesa, Tex.	.98 b	81.0 c	24.2 ab	73.3 a	11.9 a
Mangum, Okla.	1.09 a	84.0 a	24.0 ab	68.3 b	10.4 c

Table 79. Plains test: Seed data by test location

Location	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Chickasha (irr.), Okla.	18.8 a	3.28 a	0.63 a	11.8 a	4.5 a
Altus, Okla.	19.2 a	3.27 a	.56 b	11.4 b	4.2 b
Lubbock, Tex.	NA	NA	NA	NA	NA
Lamesa, Tex.	NA	NA	NA	NA	NA
Mangum, Okla.	19.2 a	3.29 a	.65 a	11.9 b	4.3 ab

Location	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Chickasha (irr.), Okla.	114.9 a	123.9 a	0.998 a	4.8 a	11.4 a
Altus, Okla.	113.5 b	122.9 b	1.002 a	4.3 a	11.3 a
Lubbock, Tex.	NA	NA	NA	NA	NA
Lamesa, Tex.	NA	NA	NA	NA	NA
Mangum, Okla.	115.2 a	124.1 a	.991 b	4.5 a	11.4 a

NA, Data not available

Table 80. Plains test: Combined yield, boll and yarn tenacity data for Altus, Mangum, and Chickasha, Okla., by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	610 a	5.29 d	34.8 bcdef	11.0 hi	132 ef
Pioneer Brand 1140	608 a	6.16 bc	34.9 bcdef	11.8 efgh	151 bc
Westburn M	596 a	6.10 bc	36.1 ab	12.0 efg	129 f
Tamcot Sp-21S.....	584 a	5.69 cd	35.4 abcd	10.8 i	136 def
Lockett 77	560 ab	5.91 bc	36.0 abc	11.8 efgh	144 bcde
Coker 5110	529 bc	5.94 bc	34.3 defg	12.7 cde	150 bcd
Deltapine SR-2	528 bc	5.92 bc	33.3 fg	11.7 fghi	147 bcd
Tamcot 788	511 bcd	6.05 bc	33.9 defg	13.0 bcd	166 a
GSA 71	506 bcd	6.07 bc	33.5 fg	12.5 cdef	130 f
Coker 310	498 cd	5.73 cd	33.7 efg	11.7 fghi	151 bc
Paymaster 303	479 cde	5.95 bc	34.5 cdefg	13.2 bc	138 cdef
Lankart LX 571	478 cde	7.07 a	35.2 bcde	13.8 b	127 f
Western 44	465 de	5.91 bc	34.1 defg	12.2 defg	147 bcd
Stripper 31A	462 de	5.35 d	33.4 fg	11.5 ghi	107 g
Paymaster 785	456 de	5.91 bc	36.8 a	12.2 defg	127 f
Paymaster 266	431 e	5.91 bc	33.7 efg	13.0 bcd	152 b
Dunn 119	428 e	6.29 b	33.1 g	14.8 a	165 a
Acala SJ-5	335 f	6.10 bc	35.9 abc	13.3 bc	175 a

Table 81. Plains test: Combined fiber data for Altus, Mangum, and Chickasha, Okla., by cotton variety

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 213	1.11 cd	0.52 cd	198 bcdefg	6.2 def	5.12 c
Pioneer Brand 1140	1.07 ef	.52 cd	201 bcdef	6.0 defgh	4.90 cde
Westburn M	1.04 ghij	.50 efg	188 defg	7.0 ab	5.03 cd
Tamcot Sp-21S.....	1.08 de	.52 cde	188 defg	7.4 a	4.22 g
Lockett 77	1.04 ghi	.50 efg	192 cdefg	6.0 defghi	4.62 ef
Coker 5110	1.15 a	.54 ab	203 bcde	6.1 defg	4.90 cde
Deltapine SR-2	1.08 e	.51 cdefg	209 abcd	5.9 efghi	5.13 c
Tamcot 788	1.08 de	.51 cdefg	212 abc	5.4 i	4.47 fg
GSA 71	1.01 ij	.50 efg	190 cdefg	6.5 cd	5.03 cd
Coker 310	1.12 bc	.53 bc	219 ab	5.6 ghi	5.00 cd
Paymaster 303	1.04 fgh	.49 g	200 bcdefg	5.5 hi	5.00 cd
Lankart LX 571	1.06 efg	.52 cdef	180 fg	6.7 bc	5.20 c
Western 44	1.02 hij	.50 defg	195 cdefg	6.2 def	4.77 def
Stripper 31A	.92 l	.46 h	178 g	5.7 fghi	6.15 a
Paymaster 785	.96 k	.49 g	186 efg	6.3 cde	5.58 b
Paymaster 266	1.01 j	.52 bcd	210 abcd	6.3 cde	5.23 c
Dunn 119	1.11 bc	.55 ab	228 a	5.5 hi	4.92 cde
Acala SJ-5	1.14 ab	.56 a	229 a	5.9 efghi	4.57 f

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Stoneville 213	1.13 bcd	84.5 abc	22.7 bcdef	68.7 a	10.3 abc
Pioneer Brand 1140	1.10 cde	84.2 abcde	24.2 bc	69.6 a	9.6 bc
Westburn M	1.06 fgh	83.3 cdef	22.0 cdef	68.3 a	10.9 a
Tamcot Sp-21S.....	1.09 defg	82.3 f	21.3 def	69.2 a	10.5 ab
Lockett 77	1.06 efgh	83.3 cdef	21.8 def	68.8 a	10.3 abc
Coker 5110	1.18 a	84.5 abc	24.8 b	69.2 a	10.8 a
Deltapine SR-2	1.10 cdef	84.3 abcd	22.8 bcdef	67.4 a	10.3 abc
Tamcot 788	1.10 cdef	83.3 cdef	24.8 b	68.8 a	10.0 abc
GSA 71	1.03 hi	83.7 cde	20.7 f	66.9 a	10.3 abc
Coker 310	1.16 ab	84.0 abcde	23.7 bcd	68.4 a	10.7 a
Paymaster 303	1.05 ghi	83.2 def	22.8 bcdef	68.1 a	10.9 a
Lankart LX 571	1.06 efgh	84.0 abcde	23.0 bcdef	68.3 a	10.7 a
Western 44	1.02 hi	83.8 bcde	21.8 def	57.8 a	10.0 abc
Stripper 31A	.92 j	83.0 ef	21.0 ef	67.6 a	10.0 abc
Paymaster 266	.95 j	83.0 ef	21.7 def	66.6 a	10.8 a
Paymaster 785	1.01 i	85.0 ab	23.3 bcde	67.7 a	10.3 abc
Dunn 119	1.14 abc	84.5 abc	27.5 a	65.8 a	9.5 c
Acala SJ-5	1.17 ab	85.2 a	28.3 a	68.9 a	10.4 abc

Table 82. Plains test: Combined yield, boll and yarn tenacity data for Lubbock and Lamesa, Tex., by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Pioneer Brand 1140	494 a	4.80 abc	34.6 abcd	10.6 def	134 fghi
Tamcot Sp-21S	478 ab	4.38 bcdefg	35.1 abc	10.3 def	131 ghi
Coker 310	471 abc	4.63 bcde	35.1 ab	10.5 def	146 cde
Dunn 119	469 abc	5.16 a	32.5 fg	13.7 a	158 b
Paymaster 303	459 abc	4.53 bcdefg	34.2 abcde	11.0 cd	129 hij
Stoneville 213	454 abc	4.15 efg	33.9 bcdef	9.9 ef	140 efg
GSA 71	449 abcd	4.57 bcdef	33.8 bcdefg	11.7 c	130 hij
Stripper 31A	445 abcd	4.14 fg	32.3 g	10.0 ef	114 k
Lockett 77	443 abcd	4.46 bcdefg	34.7 abcd	10.4 def	137 fgh
Westburn M	434 abcd	4.83 ab	33.6 cdefg	10.8 de	128 ij
Tamcot 788	431 abcd	4.61 bcdef	34.8 abcd	9.8 f	151 bc
Deltapine SR-2	425 abcd	4.19 efg	33.0 efg	10.2 def	142 def
Western 44	423 abcd	4.23 defg	33.4 defg	10.5 def	136 fghi
Paymaster 785	416 bcd	4.06 g	35.4 a	10.7 de	122 jk
Coker 5110	404 cd	4.33 cdefg	33.8 bcdefg	10.6 def	139 efg
Lankart LX 571	382 d	5.12 a	34.9 abcd	12.6 b	128 hij
Paymaster 266	378 d	4.05 g	32.6 fg	10.8 de	149 cd
Acala SJ-5	378 d	4.71 abcd	33.6 bcdefg	11.7 c	176 a

Table 83. Plains test: Combined fiber data for Lubbock and Lamesa, Tex., by cotton variety

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Pioneer Brand 1140	1.01 def	0.46 cde	190 cdef	6.6 bcdef	3.90 cdefg
Tamcot Sp-21S	1.02 de	.45 de	173 fg	7.8 a	3.75 fg
Coker 310	1.06 bc	.46 cde	198 bcd	6.0 efg	4.00 cdefg
Dunn 119	1.09 b	.50 b	208 b	6.0 fg	4.28 bc
Paymaster 303	1.00 ef	.45 de	177 efg	6.0 fg	4.00 cdefg
Stoneville 213	1.04 cd	.47 cd	186 defg	7.4 abc	3.90 cdefg
GSA 71	.98 fg	.46 de	185 defg	6.9 bcdef	4.25 bcd
Stripper 31A	.93 h	.44 e	169 g	6.4 defg	5.00 a
Lockett 77	.98 fg	.44 e	182 defg	6.4 defg	3.70 fg
Westburn M	1.00 ef	.44 e	178 def	7.5 ab	3.80 efg
Tamcot 788	1.02 de	.44 de	193 bcde	5.6 g	3.55 g
Deltapine SR-2	1.00 ef	.46 de	190 cdef	6.2 defg	4.22 bcde
Western 44	.96 g	.44 e	182 defg	6.5 cdef	3.62 fg
Paymaster 785	.91 h	.44 de	177 efg	6.9 bcde	4.45 b
Coker 5110	1.06 c	.46 de	186 defg	6.2 defg	3.95 cdefg
Lankart LX 571	1.00 ef	.46 cde	177 efg	6.9 bcdef	4.05 bcdef
Paymaster 266	1.00 ef	.49 bc	206 bc	7.0 abcd	3.82 defg
Acala SJ-5	1.12 a	.53 a	230 a	6.1 efg	3.62 fg

Variety	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Pioneer Brand 1140	1.01 defg	81.2 abcde	24.0 cde	73.8 abcde	11.5 abcd
Tamcot Sp-21S	1.01 de	80.0 de	23.5 def	76.1 ab	11.5 abcd
Coker 310	1.08 b	80.8 bcde	23.2 def	76.9 a	11.2 bcd
Dunn 119	1.12 a	82.2 ab	28.2 a	74.1 abc	11.2 bcd
Paymaster 303	.98 fgh	80.2 cde	23.8 cdef	73.0 bcdef	11.6 abc
Stoneville 213	1.05 c	81.2 abcde	25.2 bc	74.9 abc	12.3 ab
GSA 71	.98 gh	81.8 abc	23.5 def	70.6 ef	11.1 cd
Stripper 31A	.90 j	81.5 abcd	22.2 f	73.1 bcdef	11.2 cd
Lockett 77	.98 efgh	80.2 cde	22.8 ef	70.2 f	10.5 d
Westburn M	1.00 defgh	80.0 de	24.0 cde	73.9 abcd	12.0 abc
Tamcot 788	1.01 defg	80.2 cde	24.8 bcd	74.4 abc	11.6 abc
Deltapine SR-2	1.02 d	81.5 abcd	25.2 bc	70.2 f	11.8 abc
Western 44	.94 i	79.8 e	23.8 cdef	72.8 cdef	11.4 bcd
Paymaster 785	.88 j	81.2 abcde	23.0 ef	70.9 def	12.6 a
Coker 5110	1.08 b	80.5 cde	24.2 bcde	70.8 def	11.7 abc
Lankart LX 571	1.01 def	81.5 abcd	23.5 def	74.8 abc	11.6 abc
Paymaster 266	.98 h	82.8 a	25.8 b	75.5 abc	12.0 abc
Acala SJ-5	1.11 a	82.5 a	28.2 a	76.5 a	11.9 abc

Table 84. Plains test: Yield, boll and yarn tenacity data for Chickasha, Okla. (irrigated)

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	895 a	5.32	36.9	10.5	127
Westburn M	839 ab	6.44	36.0	11.5	126
Tamcot Sp-21S	829 ab	5.74	37.3	10.5	134
Pioneer Brand 1140	797 abc	6.32	36.4	11.0	153
Lockett 77	796 abc	6.12	37.1	12.0	132
Paymaster 303	731 bcd	6.40	36.2	12.5	138
Deltapine SR-2	730 bcd	6.30	35.0	12.0	147
Coker 5110	696 cde	6.40	36.1	12.0	134
Coker 310	683 cdef	6.04	37.5	11.5	156
Western 44	661 def	6.06	35.0	12.0	146
GSA 71	661 def	6.20	33.2	12.5	130
Tamcot 788	649 def	6.86	35.0	13.0	164
Paymaster 785	644 def	6.46	37.3	11.0	116
Lankart LX 571	626 defg	7.51	36.1	14.0	126
Stripper 31A	619 defg	5.56	34.0	11.5	102
Dunn 119	574 efg	6.48	34.1	14.0	157
Paymaster 266	562 fg	6.18	34.6	12.5	152
Acala SJ-5	521 g	5.36	37.5	12.5	151

Table 85. Plains test: Fiber data for Chickasha, Okla. (irrigated)

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 213	1.09	0.51	191	6.0	4.95
Westburn M	1.04	.49	191	6.6	5.10
Tamcot Sp-21S	1.05	.50	186	7.0	4.05
Pioneer Brand 1140	1.05	.52	203	6.0	4.90
Lockett 77	1.01	.49	195	5.8	4.40
Paymaster 303	1.06	.50	187	5.4	4.90
eltapine SR-2	1.06	.50	208	6.0	5.00
Coker 5110	1.11	.51	195	5.7	4.80
Coker 310	1.10	.52	206	5.4	4.90
Western 44	1.02	.50	200	6.1	4.80
GSA 71	1.00	.49	178	6.2	4.80
Tamcot 788	1.07	.50	220	5.2	4.20
Paymaster 785	.96	.50	190	6.3	5.55
Lankart LX 571	1.04	.48	180	6.2	5.20
Stripper 31A	.92	.46	166	5.6	5.85
Dunn 119	1.11	.54	208	5.3	4.50
Paymaster 266	1.00	.52	211	6.2	4.95
Acala SJ-5	1.12	.53	193	6.0	4.65

Variety	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Stoneville 213	1.12	84.0	22.5	69.2	10.3
Westburn M	1.07	83.5	22.5	68.0	10.5
Tamcot Sp-21S	1.06	82.0	20.5	66.5	10.0
Pioneer Brand 1140	1.10	84.0	24.5	67.0	9.4
Lockett 77	1.02	83.0	21.5	64.5	9.9
Paymaster 303	1.08	83.5	22.5	68.2	10.1
Deltapine SR-2	1.12	84.5	23.0	68.8	10.5
Coker 5110	1.16	83.5	25.0	69.5	10.9
Coker 310	1.16	84.5	24.5	68.8	10.7
Western 44	1.04	84.0	22.0	64.8	9.5
GSA 71	.99	83.0	21.0	67.2	10.0
Tamcot 788	1.12	84.0	26.5	71.0	10.0
Paymaster 785	.94	83.0	21.5	67.2	9.9
Lankart LX 571	1.08	84.0	23.5	69.0	10.4
Stripper 31A	.92	83.5	20.0	68.5	9.8
Dunn 119	1.12	83.5	26.5	70.5	9.6
Paymaster 266	1.02	84.5	22.0	68.0	10.3
Acala SJ-5	1.17	84.5	26.5	70.0	9.8

Table 86. Plains test: Seed data for Chickasha, Okla. (irrigated)

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 213	17.5	3.06	0.87	13.9	3.5
Westburn M	19.0	3.42	.65	10.8	5.0
Tamcot Sp-21S	18.7	3.38	.44	9.4	5.0
Pioneer Brand 1140	20.6	3.12	.62	11.2	5.0
Lockett 77	19.3	3.36	.50	12.2	4.0
Paymaster 303	20.2	3.15	.86	12.0	5.0
Deltapine SR-2	19.7	3.17	.63	9.0	4.5
Coker 5110	19.9	3.15	.91	12.5	4.5
Coker 310	14.5	3.11	.93	14.2	4.0
Western 44	19.7	3.55	.56	11.1	4.5
GSA 71	18.9	3.41	.50	12.5	4.0
Tamcot 788	19.6	3.33	.56	11.4	5.0
Paymaster 785	18.5	3.47	.52	11.7	5.0
Lankart LX 571	18.5	3.33	.35	10.9	5.5
Stripper 31A	19.0	3.37	.83	12.2	5.0
Dunn 119	17.3	3.33	.49	13.8	4.0
Paymaster 266	19.4	3.29	.57	11.5	4.0
Acala SJ-5	19.3	3.12	.60	12.7	3.0

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Stoneville 213	98.6	112.0	0.990	4.0	9.7
Westburn M	113.7	123.2	1.022	2.8	11.4
Tamcot Sp-21S	104.1	116.1	1.009	6.8	10.5
Pioneer Brand 1140	106.4	117.8	1.013	3.3	10.8
Lockett 77	112.8	122.5	1.018	3.8	11.5
Paymaster 303	116.5	125.2	.995	4.3	11.3
Deltapine SR-2	112.8	122.5	1.004	4.0	11.3
Coker 5110	113.5	123.1	1.002	2.3	11.4
Coker 310	108.4	119.3	.994	2.8	10.8
Western 44	113.8	123.2	1.016	1.8	11.6
GSA 71	125.3	131.4	.984	5.0	12.6
Tamcot 788	112.6	122.4	1.023	2.3	11.5
Paymaster 785	112.0	121.9	1.007	6.3	11.3
Lankart LX 571	141.9	142.8	.952	5.8	13.5
Stripper 31A	106.7	118.1	1.017	7.0	10.9
Dunn 119	139.6	141.3	.932	11.8	13.1
Paymaster 266	115.8	124.6	1.005	5.3	11.6
Acala SJ-5	113.9	123.3	.976	6.8	11.1

Table 87. Plains test: Yield, boll and yarn tenacity data for Altus, Okla.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Pioneer Brand 1140	843 a	6.14	33.9	12.0	150
Stoneville 213	821 a	5.66	33.8	11.5	132
GSA 71	770 ab	6.06	34.4	12.5	124
Tamcot Sp-21S	767 ab	5.86	33.4	12.0	140
Westburn M	753 abc	5.72	36.8	12.5	134
Lockett 77	728 bcd	6.08	35.1	12.5	151
Coker 5110	713 bcde	5.78	33.4	13.0	160
Tamcot 788	710 bcde	5.92	33.8	13.0	172
Deltapine SR-2	701 bcde	5.92	33.3	11.5	148
Coker 310	695 bcde	5.66	30.6	11.5	143
Stripper 31A	683 bcde	5.22	34.1	12.5	106
Paymaster 266	667 cde	6.30	33.3	14.0	158
Lankart LX 571	653 def	7.02	34.9	13.5	125
Dunn 119	640 def	6.22	33.3	14.5	162
Western 44	638 def	6.04	32.7	12.5	148
Paymaster 303	628 ef	6.06	33.3	14.0	133
Paymaster 785	569 f	5.64	35.5	14.0	134
Acala SJ-5	424 g	6.88	35.5	14.5	180

Table 88. Plains test: Fiber data for Altus, Okla.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Pioneer Brand 1140	1.07	0.52	200	6.0	5.00
Stoneville 213	1.10	.52	190	6.6	5.30
GSA 71	1.00	.50	188	6.3	5.45
Tamcot Sp-21S	1.09	.53	180	7.6	4.44
Westburn M	1.03	.50	176	7.1	4.95
Lockett 77	1.04	.50	178	6.0	4.65
Coker 5110	1.16	.57	204	6.8	4.80
Tamcot 788	1.07	.52	200	5.6	4.60
Deltapine SR-2	1.08	.52	209	6.2	5.10
Coker 310	1.11	.52	237	5.6	5.15
Stripper 31A	.92	.47	180	6.0	6.55
Paymaster 266	1.02	.54	202	6.3	5.40
Lankart LX 571	1.04	.52	176	6.7	5.25
Dunn 119	1.10	.54	228	5.6	4.90
Western 44	1.02	.51	178	6.0	4.85
Paymaster 303	1.06	.50	192	6.0	5.10
Paymaster 785	.94	.48	176	6.2	5.70
Acala SJ-5	1.13	.57	248	5.7	4.60

Variety	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Pioneer Brand 1140	1.08	84.0	21.5	70.0	10.0
Stoneville 213	1.10	84.5	21.0	69.5	9.8
GSA 71	1.01	83.5	21.5	65.8	10.3
Tamcot Sp-21S	1.12	82.5	23.0	71.5	10.8
Westburn M	1.06	83.0	22.0	67.0	10.9
Lockett 77	1.10	84.0	21.0	71.8	10.7
Coker 5110	1.17	86.0	24.0	68.2	10.4
Tamcot 788	1.06	83.5	22.5	69.5	10.2
Deltapine SR-2	1.08	84.0	22.5	65.2	10.8
Coker 310	1.14	82.5	23.0	69.2	11.0
Stripper 31A	.92	82.5	21.5	67.8	9.8
Paymaster 266	1.00	86.0	23.0	65.8	10.9
Lankart LX 571	1.02	84.0	22.0	68.0	11.1
Dunn 119	1.12	84.5	26.5	59.2	8.8
Western 44	1.00	83.5	20.0	69.2	10.0
Paymaster 303	1.05	83.0	22.5	69.2	11.3
Paymaster 785	.96	83.0	20.5	66.2	11.6
Acala SJ-5	1.14	85.0	28.5	68.2	11.2

Table 89. Plains test: Seed data for Altus, Okla.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Pioneer Brand 1140	20.9	3.22	0.60	10.4	5.0
Stoneville 213	18.4	3.02	.82	14.2	3.0
GSA 71	18.7	3.33	.54	11.7	4.0
Tamcot Sp-21S	18.7	3.39	.56	8.7	4.5
Westburn M	18.8	3.43	.59	10.9	5.0
Lockett 77	19.4	3.37	.46	11.7	4.5
Coker 5110	19.8	3.11	.70	11.8	4.0
Tamcot 788	19.6	3.36	.46	11.0	4.0
Deltapine SR-2	19.9	3.15	.55	9.7	5.0
Coker 310	19.8	3.09	.77	13.5	4.0
Stripper 31A	19.4	3.39	.62	10.9	4.5
Paymaster 266	19.0	3.18	.52	10.8	4.0
Lankart LX 571	18.6	3.43	.42	10.1	4.5
Dunn 119	17.7	3.21	.41	13.9	3.0
Western 44	19.4	3.52	.48	10.4	5.0
Paymaster 303	20.3	3.17	.66	11.4	4.5
Paymaster 785	18.4	3.43	.48	10.9	4.5
Acala SJ-5	19.3	3.13	.46	12.7	3.0

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Pioneer Brand 1140	102.5	115.0	1.026	2.5	10.5
Stoneville 213	97.8	111.4	.982	4.8	9.6
GSA 71	123.6	130.2	.985	6.5	12.1
Tamcot Sp-21S	103.6	115.8	1.005	6.0	10.4
Westburn M	109.2	119.9	1.030	3.8	11.3
Lockett 77	111.2	121.4	1.025	2.8	11.4
Coker 5110	111.1	121.3	1.013	1.8	10.7
Tamcot 788	108.5	119.4	1.030	1.8	11.2
Deltapine SR-2	112.0	121.9	.993	3.0	11.1
Coker 310	105.7	117.4	1.019	2.3	10.5
Stripper 31A	109.0	119.7	1.018	5.0	11.0
Paymaster 266	116.9	125.4	1.006	3.5	11.8
Lankart LX 571	141.4	142.4	.952	4.3	13.7
Dunn 119	137.5	139.8	.928	13.5	12.7
Western 44	111.9	121.8	1.033	2.5	11.5
Paymaster 303	112.8	122.5	1.008	2.8	11.4
Paymaster 785	114.7	123.9	.998	4.0	11.4
Acala SJ-5	114.1	123.5	.987	7.3	11.3

Table 90. Plains test: Yield, boll and yarn tenacity data for Lubbock, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Tamcot 788	689 a	4.90	34.4	10.6	158
Pioneer Brand 1140	678 ab	4.89	35.6	10.9	134
Dunn 119	675 ab	5.19	32.7	14.2	160
Paymaster 303	663 abc	4.72	35.2	11.3	128
Coker 310	656 abc	4.82	35.2	11.0	150
Tamcot Sp-21S	655 abcd	4.72	36.2	11.1	130
Stripper 31A	650 abcd	4.33	32.6	11.1	112
Stoneville 213	636 abcde	3.99	33.9	10.1	136
Paymaster 785	632 abcde	4.54	36.4	11.3	126
Westburn M	626 abcde	4.86	34.0	11.1	130
GSA 71	624 abcde	4.48	35.0	11.9	131
Lockett 77	609 abcde	4.75	35.1	11.1	134
Coker 5110	603 abcde	4.52	34.3	11.2	142
Western 44	600 abcde	4.32	33.4	10.9	137
Deltapine SR-2	590 bcde	4.59	33.8	10.6	141
Lankart LX 571	572 cde	5.57	35.3	13.7	132
Paymaster 266	559 de	4.60	33.4	11.1	148
Acala SJ-5	546 e	5.13	33.9	12.1	176

Table 91. Plains test: Fiber data for Lubbock, Tex.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Tamcot 788	1.06	0.46	198	5.6	3.75
Pioneer Brand 1140	1.02	.46	186	6.8	4.00
Dunn 119	1.12	.52	208	5.7	4.50
Paymaster 303	1.02	.46	177	6.2	4.05
Coker 310	1.09	.47	193	6.1	4.00
Tamcot Sp-21S	1.04	.46	172	8.2	3.65
Stripper 31A	.94	.44	156	6.6	5.30
Stoneville 213	1.06	.46	179	6.8	3.80
Paymaster 785	.93	.45	180	6.9	4.65
Westburn M	1.02	.44	176	7.8	3.95
GSA 71	1.00	.45	190	6.4	4.20
Lockett 77	1.01	.45	182	6.4	3.85
Coker 5110	1.09	.46	196	6.1	4.00
Western 44	.98	.44	178	6.6	3.85
Deltapine SR-2	1.02	.46	186	5.9	4.35
Lankart LX 571	1.04	.48	172	6.7	4.40
Paymaster 266	1.02	.50	210	7.2	4.05
Acala SJ-2	1.16	.55	221	6.0	3.85

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Tamcot 788	1.06	80.5	25.5	74.8	11.7
Pioneer Brand 1140	1.04	81.0	24.0	74.0	11.3
Dunn 119	1.15	82.5	28.0	76.2	10.9
Paymaster 303	1.00	80.0	24.0	73.5	11.4
Coker 310	1.12	80.5	24.0	77.2	10.5
Tamcot Sp-21S	1.03	79.5	23.5	76.8	11.1
Stripper 31A	.92	82.0	21.5	71.8	11.5
Stoneville 213	1.08	80.5	25.5	75.8	11.9
Paymaster 785	.92	81.5	23.5	70.7	12.5
Westburn M	1.02	80.0	24.5	73.2	11.8
GSA 71	1.00	81.5	23.5	71.2	10.4
Lockett 77	1.00	80.5	22.5	71.5	10.1
Coker 5110	1.12	80.0	25.0	69.2	10.9
Western 44	.98	80.5	24.5	73.8	11.4
Deltapine SR-2	1.04	81.0	25.5	69.0	11.4
Lankart LX 571	1.04	82.0	23.0	75.5	11.9
Paymaster 266	1.01	83.5	26.0	75.5	11.8
Acala SJ-5	1.15	82.5	29.0	76.0	11.4

Table 92. Plains test: Yield, boll and yarn tenacity data for Lamesa, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Pioneer Brand 1140	274 a	4.71	33.7	10.2	134
Tamcot Sp-21S	265 ab	4.04	33.9	9.5	132
Coker 310	248 ab	4.45	35.1	9.9	142
Lockett 77	243 ab	4.17	34.3	9.8	140
GSA 71	240 ab	4.66	32.7	11.5	128
Stoneville 213	236 ab	4.32	33.9	9.8	144
Deltapine SR-2	228 abc	3.79	32.3	9.8	143
Dunn 119	222 abc	5.12	32.4	13.2	157
Paymaster 303	215 abc	4.33	33.1	10.8	130
Western 44	211 abc	4.14	33.4	10.1	134
Westburn M	203 abc	4.80	33.1	10.5	126
Stripper 31A	198 abc	3.95	32.1	9.0	116
Acala SJ-5	176 abc	4.30	33.4	11.3	177
Coker 5110	165 abc	4.14	33.3	9.9	137
Paymaster 266	160 bc	3.50	31.9	10.4	150
Paymaster 785	157 bc	3.59	34.5	10.2	118
Lankart LX 571	153 bc	4.66	34.5	11.5	124
Tamcot 788	122 c	4.31	35.3	9.0	144

Table 93. Plains test: Fiber data for Lamesa, Tex.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Pioneer Brand 1140	1.00	0.46	193	6.4	3.80
Tamcot Sp-21S	1.00	.44	175	7.4	3.85
Coker 310	1.04	.46	202	6.0	4.00
Lockett 77	.96	.43	181	6.4	3.55
GSA 71	.96	.46	180	7.2	4.30
Stoneville 213	1.01	.48	193	8.0	4.00
Deltapine SR-2	.98	.46	193	6.4	4.10
Dunn 119	1.06	.48	208	6.3	4.05
Paymaster 303	.98	.45	177	5.8	3.95
Western 44	.94	.42	187	6.4	3.40
Westburn M	.98	.43	181	7.2	3.65
Stripper 31A	.92	.43	182	6.2	4.70
Acala SJ-5	1.08	.51	238	6.2	3.40
Coker 5110	1.03	.46	177	6.2	3.90
Paymaster 266	.97	.47	204	6.8	3.60
Paymaster 785	.89	.44	175	7.0	4.25
Lankart LX 571	.98	.45	183	7.1	3.70
Tamcot 788	.96	.42	188	5.4	3.35

Variety	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Pioneer Brand 1140	0.98	81.5	24.0	73.5	11.7
Tamcot Sp-21S	1.00	80.5	23.5	75.5	11.9
Coker 310	1.04	81.0	22.5	76.5	11.9
Lockett 77	.96	80.0	23.0	69.0	10.9
GSA 71	.96	82.0	23.5	70.0	11.8
Stoneville 213	1.02	82.0	25.0	74.0	12.7
Deltapine SR-2	1.00	82.0	25.0	71.5	12.3
Dunn 119	1.10	82.0	28.5	72.0	11.6
Paymaster 303	.96	80.5	23.5	72.5	11.8
Western 44	.90	79.0	23.0	71.8	11.3
Westburn M	.98	80.0	23.5	74.5	12.1
Stripper 31A	.87	81.0	23.0	74.5	10.8
Acala SJ-5	1.07	82.5	27.5	77.0	12.4
Coker 5110	1.05	81.0	23.5	72.2	12.5
Paymaster 266	.94	82.0	25.5	75.5	12.1
Paymaster 785	.85	81.0	22.5	71.0	12.6
Lankart LX 571	.98	81.0	24.0	74.0	11.4
Tamcot 788	.96	80.0	24.0	74.0	11.6

Table 94. Plains test: Yield, boll and yarn tenacity data for Mangum, Okla.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Westburn M	197 a	6.14	35.1	12.0	126
Pioneer Brand 1140	184 ab	6.02	34.0	12.5	149
Coker 5110	179 ab	5.64	32.5	13.0	156
Tamcot 788	175 abc	5.38	32.1	13.0	163
Tamcot Sp-21S	158 abcd	5.46	35.7	10.0	134
Lockett 77	158 abcd	5.54	35.4	11.0	149
Lankart LX 571	155 abcd	6.68	34.2	14.0	132
Paymaster 785	155 abcd	5.62	38.7	11.5	130
Deltapine SR-2	152 abcde	5.54	31.7	11.5	146
Coker 310	118 abcdef	5.50	32.5	12.0	152
Stoneville 213	114 abcdef	4.90	32.9	11.0	137
Western 44	95 bcdef	5.62	35.4	12.0	145
GSA 71	88 cdef	5.96	32.3	12.5	135
Stripper 31A	83 def	5.26	30.9	10.5	112
Paymaster 303	79 def	5.38	33.5	13.0	143
Dunn 119	71 def	6.16	31.0	16.0	176
Paymaster 266	64 ef	5.26	32.5	12.5	147
Acala SJ-5	60 f	6.06	33.7	13.0	194

Table 95. Plains test: Fiber data for Mangum, Okla.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Westburn M	1.03	0.50	196	7.2	5.05
Pioneer Brand 1140	1.09	.52	200	6.0	4.80
Coker 5110	1.16	.56	210	5.7	5.05
Tamcot 788	1.10	.52	217	5.6	4.60
Tamcot Sp-21S	1.11	.54	200	7.4	4.15
Lockett 77	1.07	.50	204	6.0	4.80
Lankart LX 571	1.08	.54	184	7.2	5.15
Paymaster 785	.98	.50	192	6.4	5.50
Deltapine SR-2	1.08	.52	210	5.5	5.30
Coker 310	1.14	.54	214	5.6	4.95
Stoneville 213	1.13	.53	211	5.9	5.10
Western 44	1.02	.49	206	6.4	4.65
GSA 71	1.04	.50	206	6.9	4.85
Stripper 31A	.92	.46	188	5.6	6.05
Paymaster 303	1.02	.48	222	5.2	5.00
Dunn 119	1.13	.56	249	5.6	5.35
Paymaster 266	1.02	.52	216	6.4	5.40
Acala SJ-5	1.18	.58	245	6.0	4.40

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Westburn M	1.04	83.5	21.5	70.0	11.2
Pioneer Brand 1140	1.14	84.5	26.5	71.8	9.5
Coker 5110	1.20	84.0	25.5	69.8	11.0
Tamcot 788	1.12	82.5	25.5	65.8	9.9
Tamcot Sp-21S	1.10	82.5	20.5	69.8	10.6
Lockett 77	1.08	83.0	32.0	70.0	10.3
Lankart LX 571	1.08	84.0	23.5	68.0	10.6
Paymaster 785	.95	83.0	23.0	66.2	10.9
Deltapine SR-2	1.10	84.5	23.0	68.2	9.5
Coker 310	1.18	85.0	23.5	67.2	10.4
Stoneville 213	1.16	85.0	24.5	67.2	10.7
Western 44	1.00	84.0	23.5	69.5	10.6
GSA 71	1.08	84.5	19.5	67.7	10.5
Stripper 31A	.94	83.0	21.5	66.5	10.4
Paymaster 303	1.04	83.0	23.5	66.8	11.3
Dunn 119	1.18	85.5	29.5	67.5	10.1
Paymaster 266	1.00	85.0	25.0	69.2	9.6
Acala SJ-5	1.20	86.0	30.0	68.5	10.1

Table 96. Plains test: Seed data for Mangum, Okla.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Westburn M	19.0	3.46	0.72	10.8	5.0
Pioneer Brand 1140	20.6	3.12	.65	11.3	5.0
Coker 5110	19.8	3.15	.73	12.3	4.0
Tamcot 788	19.2	3.29	.57	11.4	4.0
Tamcot Sp-21S	18.7	3.34	.53	10.5	5.0
Lockett 77	19.3	3.35	.61	12.5	4.5
Lankart LX 571	18.7	3.41	.46	11.4	5.0
Paymaster 785	18.7	3.47	.57	13.5	4.0
Deltapine SR-2	20.0	3.19	.43	9.7	5.0
Coker 310	20.0	3.15	.90	12.9	3.5
Stoneville 213	17.8	3.03	.84	12.9	4.0
Western 44	19.5	3.56	.71	10.0	5.0
GSA 71	18.8	3.40	.69	12.1	5.0
Stripper 31A	18.9	3.35	.85	11.7	4.5
Paymaster 303	20.7	3.25	.78	11.5	4.0
Dunn 119	18.0	3.36	.62	14.1	3.0
Paymaster 266	18.8	3.16	.57	13.0	4.0
Acala SJ-5	19.4	3.21	.57	12.6	3.0

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Westburn M	112.1	122.0	1.012	1.8	11.3
Pioneer Brand 1140	105.1	116.9	1.009	2.8	10.6
Coker 5110	113.7	123.2	1.011	1.5	11.3
Tamcot 788	115.7	124.6	1.009	2.5	11.4
Tamcot Sp-21S	104.7	116.6	.983	4.8	10.3
Lockett 77	110.6	120.9	1.004	3.0	11.3
Lankart LX 571	139.2	140.9	.943	5.0	13.1
Paymaster 785	115.0	124.1	.982	6.5	11.3
Deltapine SR-2	116.7	125.4	.981	4.0	11.1
Coker 310	106.8	118.2	1.015	3.8	10.8
Stoneville 213	99.1	112.4	.995	4.3	9.9
Western 44	114.9	124.0	1.031	1.0	11.8
GSA 71	126.3	132.1	.964	5.5	12.2
Stripper 31A	108.6	119.5	1.008	6.3	10.9
Paymaster 303	115.0	124.1	1.100	2.8	11.4
Dunn 119	143.2	143.6	.916	11.0	13.1
Paymaster 266	113.0	122.7	.986	6.0	11.4
Acala SJ-5	113.5	123.0	.985	8.8	11.2

Table 97. Western test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Coker 310	1152 a	6.41 ab	38.7 ab	11.8 de	138 cd
Deltapine 61	1105 a	5.75 cde	37.6 bc	11.5 e	132 de
Stoneville 213	1102 a	6.08 bcd	37.3 bc	12.3 cd	126 e
McNair 220	1081 ab	5.59 e	38.5 ab	11.4 e	142 c
Acala 1517-75	991 bc	6.29 b	36.7 c	14.0 a	166 b
Acala 1517-77	988 bc	6.14 bc	34.7 d	13.2 b	175 a
Acala SJ-5	972 c	6.65 a	38.1 abc	12.8 bc	166 b
Paymaster 303	921 c	6.22 b	37.5 bc	12.6 bc	127 e
Tamcot Sp-21	785 d	5.70 de	39.3 a	11.3 e	130 de

Table 98. Western test: Fiber data by cotton variety

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Coker 310	1.12 bc	0.51 b	180 cd	6.6 cd	4.40 abc
Deltapine 61	1.13 ab	.51 b	192 c	8.7 a	4.52 ab
Stoneville 213	1.09 cd	.50 b	175 d	7.7 b	4.63 a
McNair 220	1.07 de	.50 b	179 cd	6.5 d	4.52 ab
Acala 1517-75	1.16 a	.55 a	209 b	6.9 cd	4.13 c
Acala 1517-77	1.16 a	.55 a	228 a	6.6 cd	4.32 abc
Acala SJ-5	1.12 bc	.54 a	215 ab	6.7 cd	4.25 bc
Paymaster 303	1.08 de	.49 b	174 d	6.7 cd	4.25 bc
Tamcot Sp-21	1.06 e	.49 b	180 cd	7.1 c	4.25 bc

Variety	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Coker 310	1.15 abc	82.8 cd	22.3 cd	63.8 a	10.0 ab
Deltapine 61	1.18 ab	83.5 bc	23.0 c	66.9 a	10.9 a
Stoneville 213	1.11 cde	82.8 cd	21.2 de	62.9 a	10.8 ab
McNair 220	1.10 def	82.8 cd	21.7 de	64.7 a	10.2 ab
Acala 1517-75	1.19 a	85.0 a	25.3 b	68.1 a	9.3 b
Acala 1517-77	1.20 a	85.0 a	26.7 a	65.6 a	9.3 b
Acala SJ-5	1.14 bcd	84.0 b	25.2 b	65.7 a	10.1 ab
Paymaster 303	1.08 ef	81.7 e	21.0 e	66.6 a	10.7 ab
Tamcot Sp-21	1.06 f	82.5 d	20.7 e	66.2 a	9.9 ab

Table 99. Western test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Las Cruces, N. Mex.	1067 a	6.26	37.2 a	12.7 a	NA
Artesia, N. Mex. ..	965 a	5.93	37.9 a	11.9 a	144 a
El Paso, Tex.	NA	NA	NA	NA	145 a
Pecos, Tex.	NA	NA	NA	NA	144 a

NA, Data not available

Table 100. Western test: Fiber data by test location

Location	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Las Cruces, N. Mex.	NA	NA	NA	NA	NA
Artesia, N. Mex. ..	1.13 a	0.52 b	196 a	7.4 a	4.30 a
El Paso, Tex.	1.15 a	.54 a	187 b	7.3 a	4.30 a
Pecos, Tex.	1.05 b	.48 c	194 a	6.4 b	4.48 a

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Las Cruces, N. Mex.	NA	NA	NA	NA	NA
Artesia, N. Mex. ..	1.14 b	83.1 b	24.3 a	65.8 a	10.2 a
El Paso, Tex.	1.19 a	84.3 a	22.3 a	66.8 a	10.9 a
Pecos, Tex.	1.06 c	82.7 b	22.4 a	64.2 a	9.3 a

NA, Data not available.

Table 101. Western test: Seed data by test location

Location	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Las Cruces, N. Mex.	NA	NA	NA	NA	NA
Artesia, N. Mex. ..	20.2	3.43	0.78	11.1	5.3
El Paso, Tex.	NA	NA	NA	NA	NA
Pecos, Tex.	NA	NA	NA	NA	NA

Location	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Las Cruces, N. Mex.	NA	NA	NA	NA	NA
Artesia, N. Mex. ..	100.8	113.4	1.033	2.6	10.3
El Paso, Tex.	NA	NA	NA	NA	NA
Pecos, Tex.	NA	NA	NA	NA	NA

NA, Data not available.

Table 102. Western test: Yield, boll and yarn tenacity data for Las Cruces, N. Mex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Coker 310	1235 a	6.46	37.5	12.4	NA
Stoneville 213	1188 a	6.49	36.3	12.8	NA
Acala 1517-75	1162 a	6.59	36.6	14.4	NA
Deltapine 61	1124 ab	5.54	36.1	11.5	NA
McNair 220	1116 ab	5.98	38.5	11.8	NA
Acala 1517-77	1089 ab	6.38	34.8	13.7	NA
Acala SJ-5	997 bc	6.90	38.2	12.8	NA
Paymaster 303	870 cd	5.93	38.1	13.0	NA
Tamcot Sp-21	824 d	6.04	38.9	11.8	NA

NA, Data not available.

Table 103. Western test: Yield, boll and yarn tenacity data for Artesia, N. Mex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 61	1090 a	5.97	39.2	11.5	127
Coker 310	1085 a	6.37	39.8	11.3	137
McNair 220	1054 ab	5.20	38.5	11.0	144
Stoneville 213	1032 ab	5.67	38.2	11.8	122
Paymaster 303	962 abc	6.50	37.0	12.2	124
Acala SJ-5	951 abc	6.40	38.0	12.7	167
Acala 1517-77	908 bc	5.90	34.5	12.7	177
Acala 1517-75	853 cd	6.00	36.7	13.6	167
Tamcot Sp-21	754 d	5.37	39.8	10.7	134

Table 104. Western test: Fiber data for Artesia, N. Mex.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 61	1.14	0.52	186	9.2	4.40
Coker 310	1.14	.51	178	6.9	4.40
McNair 220	1.08	.49	180	6.8	4.45
Stoneville 213	1.10	.50	173	8.7	4.40
Paymaster 303	1.14	.52	181	6.9	4.10
Acala SJ-5	1.13	.54	219	7.0	4.35
Acala 1517-77	1.18	.55	246	7.2	4.35
Acala 1517-75	1.17	.56	206	7.4	4.25
Tamcot Sp-21	1.09	.50	192	7.1	4.05

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Deltapine 61	1.20	83.0	24.5	64.5	11.8
Coker 310	1.18	83.0	23.0	65.8	9.9
McNair 220	1.08	82.0	23.0	65.8	10.6
Stoneville 213	1.12	82.5	21.5	67.5	11.5
Paymaster 303	1.10	81.5	22.0	66.5	10.1
Acala SJ-5	1.13	84.0	27.0	63.0	10.5
Acala 1517-77	1.20	85.5	28.5	63.8	9.2
Acala 1517-75	1.20	84.5	26.5	66.5	9.2
Tamcot Sp-21	1.08	82.0	22.5	68.5	8.6

Table 105. Western test: Seed data for Artesia, N. Mex.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 61	19.1	3.33	0.75	11.7	5.0
Coker 310	20.2	3.61	.79	12.0	4.5
McNair 220	20.5	3.24	.77	10.9	6.0
Stoneville 213	18.8	3.35	.96	14.2	4.0
Paymaster 303	19.9	3.34	.73	12.6	5.0
Acala SJ-5	20.8	3.71	.57	10.1	5.5
Acala 1517-77	20.6	3.40	.81	11.7	5.0
Acala 1517-75	21.2	3.41	.81	9.2	6.0
Tamcot Sp-21	21.0	3.51	.90	7.7	7.0

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Deltapine 61	91.1	106.3	1.003	6.0	9.1
Coker 310	93.8	108.4	1.068	2.3	10.0
McNair 220	88.6	104.3	1.032	1.3	9.1
Stoneville 213	96.9	109.8	1.033	2.3	10.0
Paymaster 303	99.7	112.8	1.019	4.3	10.1
Acala SJ-5	104.2	116.2	1.065	1.0	11.1
Acala 1517-77	114.9	124.0	1.022	2.0	11.7
Acala 1517-75	119.5	127.3	1.032	2.8	11.9
Tamcot Sp-21	98.5	111.9	1.021	2.0	10.0

Table 106. Western test: Fiber data for El Paso, Tex.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Acala 1517-75	1.20	0.58	206	7.2	4.00
Acala 1517-77	1.20	.58	210	6.7	4.25
Acala SJ-5	1.16	.56	208	7.0	4.35
Coker 310	1.18	.56	182	6.9	4.30
Deltapine 61	1.17	.53	190	8.6	4.45
McNair 220	1.12	.52	171	6.5	4.40
Paymaster 303	1.11	.50	174	7.0	4.25
Stoneville 213	1.13	.52	166	7.8	4.75
Tamcot Sp-21	1.10	.52	176	7.7	4.00

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Acala 1517-75	1.24	86.5	24.0	68.5	9.7
Acala 1517-77	1.25	85.5	25.5	66.2	9.7
Acala SJ-5	1.18	84.5	24.5	66.8	10.3
Coker 310	1.24	83.5	22.5	62.2	11.7
Deltapine 61	1.22	85.0	22.0	71.8	10.5
McNair 220	1.15	84.0	21.0	65.2	10.8
Paymaster 303	1.12	82.5	20.0	69.5	12.0
Stoneville 213	1.17	83.5	21.0	64.2	11.2
Tamcot Sp-21	1.14	83.5	20.5	66.8	11.9

Table 107. Western test: Fiber data for Pecos, Tex.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Acala 1517-75	1.11	0.52	216	6.3	4.15
Acala 1517-77	1.12	.52	228	5.8	4.35
Acala SJ-5	1.09	.51	218	6.1	4.05
Coker 310	1.04	.46	181	5.9	4.50
Deltapine 61	1.07	.48	198	8.2	4.70
McNair 220	1.02	.48	186	6.2	4.70
Paymaster 303	1.00	.44	167	6.2	4.40
Stoneville 213	1.06	.48	185	6.7	4.75
Tamcot Sp-21	.98	.46	172	6.4	4.70

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Acala 1517-75	1.12	84.0	25.5	69.2	9.0
Acala 1517-77	1.14	84.0	26.0	66.8	9.0
Acala SJ-5	1.11	83.5	24.0	67.2	9.6
Coker 310	1.04	82.0	21.5	63.2	8.3
Deltapine 61	1.10	82.5	22.5	64.5	10.3
McNair 220	1.05	82.5	21.0	63.0	9.1
Paymaster 303	1.03	81.0	21.0	63.8	9.9
Stoneville 213	1.04	82.5	21.0	57.0	9.6
Tamcot Sp-21	.96	82.0	19.0	63.5	9.2

Table 108. San Joaquin test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Acala SJ-2	1370 a	7.00 ab	38.5 a	12.6 a	158 a
Stoneville 213	1321 a	5.47 c	40.0 a	10.1 c	125 c
Acala SJ-5	1252 ab	7.24 a	39.3 a	11.6 b	169 a
Coker 310	1244 ab	5.76 c	40.8 a	9.9 c	140 b
Paymaster 303	1138 b	6.31 bc	38.2 a	11.1 b	117 c

Table 109. San Joaquin test: Fiber data by cotton variety

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Acala SJ-2	1.12 a	0.52 a	202 a	6.1 b	4.50 a
Stoneville 213	1.04 b	.48 b	167 b	6.6 a	4.58 a
Acala SJ-5	1.11 a	.50 a	212 a	6.0 bc	4.32 a
Coker 310	1.08 ab	.47 b	176 b	5.9 bc	4.35 a
Paymaster 303	1.00 c	.44 c	161 b	5.6 c	4.52 a

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Acala SJ-2	1.12 a	82.8 a	25.5 a	70.0 a	11.6 a
Stoneville 213	1.06 b	81.5 a	20.8 b	72.2 a	11.7 a
Acala SJ-5	1.12 a	82.8 a	26.5 a	72.5 a	11.0 a
Coker 310	1.10 ab	81.5 a	21.5 b	70.9 a	11.4 a
Paymaster 303	1.00 c	81.0 a	20.5 b	72.4 a	11.7 a

Table 110. San Joaquin test: Seed data by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Acala SJ-2	19.2 c	3.12 c	0.75 ab	12.9 a	3.0 a
Stoneville 213	19.9 c	3.31 b	1.06 a	11.9 a	3.3 a
Acala SJ-5	22.0 a	3.44 a	.42 b	8.6 b	3.8 a
Coker 310	21.3 ab	3.32 b	.63 b	9.8 b	3.8 a
Paymaster 303	21.1 b	3.35 ab	.56 b	9.6 b	3.8 a

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Acala SJ-2	103.5 a	115.7 a	1.083 b	1.8 a	11.2 a
Stoneville 213	83.8 c	100.5 c	1.109 a	2.4 a	9.3 d
Acala SJ-5	97.2 b	110.9 b	1.097 ab	1.1 a	10.7 b
Coker 310	86.5 c	102.7 c	1.102 ab	1.3 a	9.4 d
Paymaster 303	95.6 b	109.7 b	1.082 b	2.0 a	10.3 c

Table 111. San Joaquin test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Maricopa, Calif. ..	1436 a	6.54 a	38.5 a	11.0 a	142 a
West Side Field Station, Calif. .	1093 b	6.17 a	40.2 a	11.1 a	141 a

Table 112. San Joaquin test: Fiber data by test location

Location	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Maricopa, Calif. ..	1.07 a	0.47 a	182 a	6.2 a	4.19 b
West Side Field Station, Calif. .	1.07 a	.49 a	185 a	5.8 a	4.72 a

Location	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Maricopa, Calif. ..	1.09 a	81.4 a	23.0 a	73.2 a	11.6 a
West Side Field Station, Calif. .	1.07 a	82.4 a	22.9 a	70.0 b	11.3 b

Table 113. San Joaquin test: Seed data by test location

Location	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Maricopa, Calif. ..	20.2 b	3.44 a	0.60 a	1.009 b	3.7 a
West Side Field Station, Calif. .	21.2 a	3.18 b	.76 a	1.104 a	3.3 a

Location	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Maricopa, Calif. ..	95.6 a	109.7 a	1.074 b	2.1 a	10.2 a
West Side Field Station, Calif. .	91.0 b	106.1 b	1.115 a	1.4 a	10.2 a

Table 114. San Joaquin test: Yield, boll and yarn tenacity data for Maricopa, Calif.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Acala SJ-2	1580 a	7.55	37.8	13.0	156
Acala SJ-5	1464 ab	7.44	38.2	11.3	170
Stoneville 213	1443 ab	5.54	39.3	9.7	124
Coker 310	1367 b	6.03	40.3	9.9	138
Paymaster 303	1329 b	6.16	37.2	11.0	122

Table 115. San Joaquin test: Fiber data for Maricopa, Calif.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Acala SJ-2	1.12	0.51	202	6.4	4.15
Acala SJ-5	1.10	.49	214	6.2	4.15
Stoneville 213	1.06	.48	159	6.8	4.35
Coker 310	1.10	.46	179	6.2	4.05
Paymaster 303	1.00	.43	158	5.6	4.25

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Acala SJ-2	1.12	81.5	26.0	72.2	11.7
Acala SJ-5	1.14	82.0	26.5	74.5	11.3
Stoneville 213	1.06	81.5	20.5	73.0	11.6
Coker 310	1.12	81.0	22.0	74.0	11.8
Paymaster 303	1.00	81.0	20.0	72.5	11.7

Table 116. San Joaquin test: Seed data for Maricopa, Calif.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Acala SJ-2	18.7	3.24	0.57	12.4	3.0
Acala SJ-5	21.8	3.63	.36	8.4	4.0
Stoneville 213	19.6	3.44	.87	11.7	3.5
Coker 310	20.5	3.42	.70	9.3	4.0
Paymaster 303	20.6	3.47	.53	8.6	4.0

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Acala SJ-2	104.4	116.4	1.066	2.8	11.1
Acala SJ-5	99.4	112.6	1.077	.5	10.7
Stoneville 213	86.9	103.0	1.082	3.0	9.4
Coker 310	90.3	105.6	1.075	1.5	9.5
Paymaster 303	97.2	110.9	1.069	2.5	10.1

Table 117. San Joaquin test: Yield, boll and yarn tenacity data for West Side Field Station, Calif.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	1199 a	5.41	40.8	10.5	126
Acala SJ-2	1161 ab	6.45	39.2	12.1	159
Coker 310	1121 ab	5.50	41.3	9.9	142
Acala SJ-5	1040 ab	7.05	40.4	11.8	168
Paymaster 303	947 b	6.45	39.3	11.2	111

Table 118. San Joaquin test: Fiber data for West Side Field Station, Calif.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 213	1.03	0.48	175	6.4	4.80
Acala SJ-2	1.12	.52	202	5.9	4.85
Coker 310	1.07	.48	172	5.6	4.65
Acala SJ-5	1.12	.52	210	5.8	4.50
Paymaster 303	1.00	.44	165	5.6	4.80

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Stoneville 213	1.06	81.5	21.0	71.5	11.7
Acala SJ-2	1.13	84.0	25.0	67.8	11.4
Coker 310	1.07	82.0	21.0	67.8	11.0
Acala SJ-5	1.11	83.5	26.5	70.5	10.6
Paymaster 303	1.00	81.0	21.0	72.2	11.7

Table 119. San Joaquin test: Seed data for West Side Field Station, Calif.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 213	20.3	3.19	1.25	12.2	3.0
Acala SJ-2	19.8	2.99	.93	13.4	3.0
Coker 310	22.0	3.22	.57	10.2	3.5
Acala SJ-5	22.2	3.26	.48	8.9	3.5
Paymaster 303	21.6	3.24	.59	10.6	3.5

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Stoneville 213	80.8	98.1	1.136	1.8	9.2
Acala SJ-2	102.6	115.0	1.100	.8	11.3
Coker 310	82.8	99.7	1.129	1.0	9.4
Acala SJ-5	95.0	109.3	1.117	1.8	10.6
Paymaster 303	94.1	108.6	1.094	1.5	10.4

Table 120. High-quality test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 7124-299	898 a	4.80 f	39.0 ef	9.4 j	154 bc
La BD 434 RKR	873 a	5.53 abc	38.1 ghij	11.1 de	152 bc
Stoneville 1181 ...	818 b	4.48 g	36.8 l	10.7 fg	151 bc
Stoneville 213	816 b	5.29 cde	38.5 fgh	10.6 fgh	139 de
La BD 453 RKR	797 bc	5.04 e	38.6 fg	10.4 ghi	152 bc
Coker 76-110	793 bc	5.13 e	41.1 b	10.8 efg	136 e
Coker 76-114	766 cd	5.12 e	39.3 de	10.2 i	143 d
PD 5657	764 cde	5.12 e	39.7 d	10.3 hi	157 bc
Deltapine 7124-293	753 cde	4.74 f	40.4 c	10.4 ghi	153 bc
Coker 80903	745 de	5.49 abc	38.3 ghi	11.0 de	152 bc
Delcot 311	734 def	5.70 a	37.6 j	11.2 cd	155 bc
Coker 310	728 def	5.38 bcd	37.8 ij	10.7 fg	150 c
WM 58-8-65	727 def	5.62 ab	37.9 hij	11.4 bc	142 de
WM 53-3-31	718 ef	5.46 abc	38.6 fg	11.1 de	142 de
Mo. 63-277-1B	689 fg	5.17 de	38.1 ghij	11.1 de	154 bc
Stoneville 1366 ...	670 g	4.60 fg	41.9 a	10.9 def	154 bc
Mo. 73-1203	668 g	5.49 abc	37.0 kl	11.5 b	156 bc
PD 5717	656 g	4.79 f	39.3 de	10.5 fghi	158 b
Acala SJ-5	538 h	5.65 a	37.5 jk	11.8 a	172 a

Table 121. High-quality test: Fiber data by cotton variety

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 7124-299	1.07 fgh	0.50 efg	206 bcd	6.0 de	5.10 ab
La BD 434 RKR	1.10 abcdef	.50 efg	201 cde	6.1 d	4.69 efg
Stoneville 1181 ...	1.10 abcde	.50 defg	195 efg	5.0 ij	5.08 abc
Stoneville 213	1.08 efgh	.50 g	182 h	6.2 d	4.99 bcd
La BD 453 RKR	1.08 defg	.51 bcdefg	203 bcde	7.0 b	4.82 def
Coker 76-110	1.07 gh	.50 fg	191 fgh	6.6 c	4.64 fg
Coker 76-114	1.08 efgh	.50 g	189 gh	5.3 hi	5.01 abcd
PD 5657	1.08 efgh	.51 bcdefg	200 cdef	5.4 gh	4.72 efg
Deltapine 7124-293	1.09 cdef	.50 fg	200 cdef	5.9 def	4.90 bcde
Coker 80903	1.10 abcd	.51 bcdefg	196 defg	5.3 hi	4.62 fg
Delcot 311	1.06 h	.52 bc	208 bc	7.5 a	4.53 g
Coker 310	1.11 ab	.51 bcdef	197 defg	5.5 gh	4.70 efg
WM 58-8-65	1.10 abcd	.52 bcde	194 efg	7.2 ab	4.88 cde
WM 53-3-31	1.09 bcdef	.51 bcdef	189 gh	7.3 a	4.97 bcd
Mo. 63-277-1B	1.10 abcd	.52 bcd	202 cde	6.2 d	4.57 g
Stoneville 1366 ...	1.11 abc	.52 bc	212 b	4.9 j	5.21 a
Mo. 73-1203	1.11 abc	.52 b	205 bcd	6.1 de	4.57 g
PD 5717	1.11 ab	.51 cdefg	206 bcd	5.6 fgh	4.87 cde
Acala SJ-5	1.12 a	.54 a	235 a	5.7 efg	4.56 g

Variety	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Deltapine 7124-299	1.09 gh	83.3 bcd	26.9 ab	69.3 abc	10.1 bcde
La BD 434 RKR	1.12 bcdefg	83.2 bcd	24.3 ef	70.1 ab	9.7 cdef
Stoneville 1181 ...	1.14 abc	83.4 bcd	25.6 cd	65.4 d	9.6 ef
Stoneville 213	1.11 cdefgh	83.0 cd	23.6 fg	67.9 abcd	10.2 bcd
La BD 453 RKR	1.10 efgh	83.7 abcd	24.9 de	68.7 abc	10.0 bcde
Coker 76-110	1.09 fgh	83.4 bcd	23.6 fg	66.7 cd	10.8 a
Coker 76-114	1.09 fgh	82.9 d	24.0 ef	66.9 cd	10.4 ab
PD 5657	1.08 h	83.1 cd	25.7 cd	67.5 abcd	9.8 cdef
Deltapine 7124-293	1.12 abcdef	83.2 bcd	26.4 bc	70.5 a	9.4 f
Coker 80903	1.13 abcde	83.1 cd	24.8 def	68.1 abcd	10.2 bcd
Delcot 311	1.05 i	83.8 ab	25.0 de	68.0 abcd	10.1 bcde
Coker 310	1.13 abcde	83.0 cd	23.8 efg	68.7 abc	10.2 bc
WM 58-8-65	1.13 abcd	83.7 abcd	23.6 fg	69.2 abc	9.8 cdef
WM 53-3-31	1.11 defgh	83.2 bcd	22.7 g	69.1 abc	9.7 cdef
Mo. 63-277-1B	1.11 cdefgh	83.8 abc	23.7 fg	66.7 cd	10.0 bcde
Stoneville 1366 ...	1.15 a	84.4 a	27.6 a	66.8 cd	9.6 def
Mo. 73-1203	1.14 ab	84.4 a	24.3 ef	67.5 abcd	10.4 ab
PD 5717	1.14 ab	83.3 bcd	26.6 abc	67.9 abcd	10.0 bcde
Acala SJ-5	1.12 abcde	84.4 a	27.4 ab	67.1 bcd	10.0 bcde

Table 122. High-quality test: Seed data by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 7124-299	18.9 abcd	3.54 ab	0.82 cde	10.9 ab	4.5 abcd
La BD 434 RKR	19.0 abc	3.55 ab	.84 cd	11.1 ab	4.7 abc
Stoneville 1181 ...	17.3 de	3.49 ab	.81 cde	12.5 ab	4.2 cde
Stoneville 213	16.7 e	3.46 b	.76 def	13.9 a	4.0 def
La BD 453 RKR	19.2 abc	3.50 ab	.88 bc	12.0 ab	4.7 abc
Coker 76-110	18.9 abcd	3.71 ab	.85 cd	11.9 ab	5.0 a
Coker 76-114	17.7 cde	3.48 ab	.81 cde	11.2 ab	4.5 abcd
PD 5657	18.2 bcde	3.50 ab	.80 cde	12.0 ab	4.8 ab
Deltapine 7124-293	17.0 e	3.60 ab	.68 f	10.8 ab	4.7 abc
Coker 80903	19.0 abc	3.60 ab	.77 def	12.8 ab	4.3 bcde
Delcot 311	19.0 abc	3.78 ab	.82 cde	9.8 b	4.8 ab
Coker 310	18.1 bcde	3.55 ab	.73 ef	10.3 b	4.3 bcde
WM 58-8-65	18.1 bcde	3.40 b	.70 f	12.6 ab	4.8 ab
WM 53-3-31	18.6 abcd	3.40 b	.81 cde	12.3 ab	4.8 ab
Mo. 63-277-1B	20.0 a	3.83 a	.96 b	10.9 ab	4.8 ab
Stoneville 1366 ...	20.2 a	3.74 ab	1.08 a	11.8 ab	4.7 abc
Mo. 73-1203	19.7 ab	3.81 a	.97 b	12.1 ab	4.3 bcde
PD 5717	17.8 cde	3.59 ab	.75 def	13.5 a	3.5 f
Acala SJ-5	18.9 abcd	3.71 ab	.55 g	10.4 b	3.8 ef

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Deltapine 7124-299	84.0 h	100.6 g	1.054 bcdef	2.2 abc	8.9 i
La BD 434 RKR	99.8 bc	112.9 bc	1.025 ghij	1.3 c	10.2 cde
Stoneville 1181 ...	100.3 bc	113.2 bc	.996 k	2.2 abc	10.1 defg
Stoneville 213	95.5 cdef	109.6 cde	1.008 ijh	1.9 bc	9.6 h
La BD 453 RKR	92.6 efg	107.4 def	1.047 cdefg	1.7 bc	9.8 fgh
Coker 76-110	98.4 bcd	111.8 c	1.031 efghij	3.6 a	10.2 cde
Coker 76-114	92.2 fg	107.0 ef	1.043 defg	1.2 c	9.6 h
PD 5657	91.7 fg	106.7 ef	1.026 fghij	1.8 bc	9.5 h
Deltapine 7124-293	95.6 cdef	109.6 cde	1.014 hijk	2.6 abc	9.7 gh
Coker 80903	93.5 defg	108.1 def	1.061 bcd	2.4 abc	9.9 efgh
Delcot 311	99.1 bc	112.4 c	1.072 bc	1.3 c	10.6 b
Coker 310	98.9 bc	112.1 c	1.041 defgh	1.1 c	10.4 bcd
WM 58-8-65	102.9 b	115.9 ab	1.003 jk	2.3 abc	10.3 bcde
WM 53-3-31	98.3 bcd	111.7 c	1.015 hijk	1.3 c	10.1 def
Mo. 63-277-1B	91.6 fg	106.6 ef	1.103 a	2.3 abc	10.1 def
Stoneville 1366 ...	98.8 bc	112.4 c	1.029 efghij	3.1 ab	10.3 bcde
Mo. 73-1203	97.2 cde	110.8 cd	1.079 b	1.8 bc	10.5 bc
PD 5717	90.5 g	105.7 f	1.055 bcde	2.1 abc	9.5 h
Acala SJ-5	108.0 a	119.0 a	1.033 efghi	1.1 c	11.2 a

Table 123. High-quality test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
St. Joseph, La. ...	1422 a	5.64 b	40.8 b	10.7 c	164 a
College Station, Tex.	956 b	4.55 e	37.7 d	10.7 c	158 bc
Portageville, Mo. .	824 c	5.06 cde	39.2 c	10.8 c	140 f
Tifton, Ga.	772 cd	5.52 bc	38.1 d	11.4 b	150 d
Florence, S. C. ...	718 d	6.18 a	41.8 a	10.4 d	138 f
Belle Mina, Ala. ..	636 e	4.77 de	37.7 d	12.6 a	156 c
Jackson, Tenn.	569 ef	5.16 bcd	34.3 e	10.8 c	159 b
Stoneville, Miss. .	544 ef	4.72 de	39.2 c	10.0 e	151 d
Rocky Mt., N. C. ..	508 f	5.11 cd	39.8 c	9.8 e	147 e

Table 124. High-quality test: Fiber data by test location

Location	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
St. Joseph, La. ...	1.12 c	0.52 c	198 b	6.0 b	4.59 e
College Station, Tex.	1.14 b	.57 a	213 a	6.0 b	4.48 f
Portageville, Mo. .	1.11 c	.49 d	198 bc	6.0 b	4.79 d
Tifton, Ga.	1.09 d	.52 c	197 bc	5.6 c	5.16 b
Florence, S. C. ...	1.01 f	.47 f	196 bc	6.5 a	5.56 a
Belle Mina, Ala. ..	1.15 a	.53 b	207 a	6.4 a	4.83 d
Jackson, Tenn.	1.15 ab	.54 b	212 a	5.9 b	4.33 g
Stoneville, Miss. .	1.06 e	.48 e	196 bc	5.6 c	4.99 c
Rocky Mt., N. C. ..	1.02 f	.47 f	191 c	6.5 a	4.55 ef

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
St. Joseph, La. ...	1.15 bc	84.3 bc	24.4 de	70.3 ab	9.9 c
College Station, Tex.	1.14 c	84.9 a	25.3 c	62.9 d	11.1 b
Portageville, Mo. .	1.14 c	82.7 d	25.9 b	66.0 c	9.6 c
Tifton, Ga.	1.11 d	84.6 ab	24.8 cd	68.3 bc	9.0 de
Florence, S. C. ...	1.02 e	82.2 d	24.4 de	67.2 c	9.4 cd
Belle Mina, Ala. ..	1.18 a	84.4 bc	26.2 ab	72.2 a	10.9 b
Jackson, Tenn.	1.17 ab	83.9 c	26.7 a	70.6 ab	11.9 a
Stoneville, Miss. .	1.08 d	81.7 e	23.1 f	63.4 d	8.5 e
Rocky Mt., N. C. ..	1.01 e	82.8 d	24.0 e	71.2 a	9.8 c

Table 125. High-quality test: Seed data by test location

Location	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
St. Joseph, La. ...	19.7 a	3.37 b	0.87 a	11.0 b	4.6 b
Florence, S. C. ...	17.8 b	3.87 a	.85 a	10.7 b	4.9 a
Belle Mina, Ala. ..	18.2 b	3.53 b	.70 b	13.5 a	3.9 c

Location	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
St. Joseph, La. ...	95.8 b	110.0 b	1.021 c	2.5 a	9.8 b
Florence, S. C. ...	88.4 c	104.1 c	1.058 a	1.5 b	9.4 c
Belle Mina, Ala. ..	104.6 a	116.5 a	1.037 b	1.9 b	10.9 a

Table 126. High-quality test: Combined yield, boll and yarn tenacity data for College Station, Tex., St. Joseph, La., Stoneville, Miss., Jackson, Tenn., and Portageville, Mo., by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 7124-299	1038 a	4.60 fgh	39.0 c	9.1 h	157 bc
La BD 434 RKR	1008 a	5.46 a	37.5 efg	11.0 bcd	152 bcd
Stoneville 213 ...	930 b	5.29 abc	38.2 cde	10.4 efg	144 de
La BD 453 RKR	924 b	4.90 def	38.0 def	10.1 efg	154 bc
Stoneville 1181 ...	921 b	4.27 i	36.3 hi	10.3 efg	153 bcd
Coker 76-110	879 bc	4.96 de	40.5 b	10.5 def	139 e
Coker 76-114	877 bc	4.91 def	38.7 cd	10.0 fg	149 cd
Deltapine 7124-293	835 cd	4.49 ghi	40.4 b	9.8 g	155 bc
WM 58-8-65	831 cd	5.47 a	37.5 efg	11.2 b	144 de
Coker 80903	828 cd	5.33 abc	37.3 fg	11.0 bcd	159 b
Delcot 311	818 cde	5.49 a	36.8 ghi	11.2 ab	158 bc
Coker 310	812 cde	5.06 cd	37.3 fg	10.5 def	152 bcd
PD 5657	804 cdef	5.08 bcd	39.1 c	10.2 efg	156 bc
WM 53-3-31	798 def	5.31 abc	38.3 cde	10.9 bcd	144 de
Mo. 63-277-1B	795 def	5.02 cd	37.7 ef	11.1 bc	158 bc
Mo. 73-1203	752 efg	5.33 abc	36.1 i	11.5 ab	158 bc
Stoneville 1366 ...	734 fg	4.38 hi	41.6 a	10.6 cde	162 b
PD 5717	721 g	4.70 efg	39.0 c	10.2 efg	161 b
Acala SJ-5	597 h	5.41 ab	37.1 fgh	11.7 a	176 a

Table 127. High-quality test: Combined fiber data for College Station, Tex., St. Joseph, La., Stoneville, Miss., Jackson, Tenn., and Portageville, Mo., by cotton variety

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 7124-299	1.09 e	0.51 defg	206 bcd	5.8 defg	4.99 ab
La BD 434 RKR	1.12 abcde	.51 cdefg	202 bcd	6.1 cde	4.57 cdef
Stoneville 213	1.10 abcde	.50 fg	185 e	5.9 cdef	4.81 abcd
La BD 453 RKR	1.10 abcde	.51 cdefg	204 bcd	6.8 b	4.60 cdefg
Stoneville 1181 ...	1.12 abcde	.51 efg	196 de	4.8 jk	4.89 abc
Coker 76-110	1.10 de	.51 cdefg	195 de	6.3 c	4.50 defgh
Coker 76-114	1.10 bcde	.50 fg	193 de	5.1 ijk	4.78 abcde
Deltapine 7124-293	1.11 abcde	.50 fg	199 cd	5.7 efgh	4.80 abcd
WM 58-8-65	1.13 abcd	.53 abcde	196 de	6.8 b	4.73 bcdef
Coker 80903	1.13 abc	.52 bcdef	202 bcd	5.2 hij	4.36 gh
Delcot 311	1.09 e	.53 abc	214 b	7.3 a	4.24 g
Coker 310	1.13 ab	.52 abcde	198 cd	5.5 fghi	4.58 cdefg
PD 5657	1.10 cde	.52 bcdefg	202 bcd	5.5 fghi	4.59 cdefg
WM 53-3-31	1.12 abcde	.53 abcd	194 de	7.0 ab	4.78 abcde
Mo. 63-277-1B	1.12 abcde	.53 abc	202 bcd	6.2 cd	4.46 efg
Mo. 73-1203	1.13 ab	.54 ab	209 bc	6.1 cde	4.29 gh
Stoneville 1366 ...	1.13 abc	.53 abc	213 b	4.8 k	5.06 a
PD 5717	1.12 abcd	.52 bcdefg	210 bc	5.4 ghi	4.68 bcdef
Acala SJ-5	1.14 a	.54 a	239 a	5.7 efgh	4.43 fgh

Variety	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Deltapine 7124-299	1.11 cd	83.5 bcdef	26.9 ab	67.4 a	10.3 abcd
La BD 434 RKR	1.16 ab	83.2 def	24.6 cdefg	67.6 a	9.8 cd
Stoneville 213	1.14 abc	83.1 def	23.4 gh	66.7 a	10.4 abcd
La BD 453 RKR	1.12 bc	83.4 cdef	24.5 cdefg	66.5 a	10.0 bcd
Stoneville 1181 ...	1.15 abc	82.9 ef	25.4 bcde	65.0 a	9.8 cd
Coker 76-110	1.11 cd	83.5 bcdef	23.7 fgh	67.0 a	11.0 a
Coker 76-114	1.11 cd	82.7 f	24.2 cdefgh	65.4 a	10.8 ab
Deltapine 7124-293	1.14 abc	83.1 def	26.7 ab	69.1 a	9.6 d
WM 58-8-65	1.16 ab	83.7 abcdef	23.8 fgh	66.9 a	9.8 cd
Coker 80903	1.16 ab	82.8 ef	25.3 bcdef	67.1 a	10.5 abcd
Delcot 311	1.08 d	83.9 abcde	25.6 bcd	67.1 a	10.3 abcd
Coker 310	1.15 abc	83.3 cdef	23.9 efgh	66.9 a	10.2 bcd
PD 5657	1.11 cd	83.1 def	25.8 bc	65.7 a	10.1 bcd
WM 53-3-31	1.14 abc	83.2 def	22.8 h	68.4 a	9.9 cd
Mo. 63-277-1B	1.15 abc	84.1 abcd	24.1 defgh	64.6 a	10.3 abcd
Mo. 73-1203	1.16 ab	84.5 ab	24.2 cdefgh	66.7 a	10.5 abc
Stoneville 1366 ...	1.17 a	84.7 a	27.6 a	66.6 a	9.8 cd
PD 5717	1.17 a	83.3 cdef	26.2 ab	67.1 a	10.3 abcd
Acala SJ-5	1.15 abc	84.3 abc	27.7 a	64.7 a	10.1 bcd

Table 128. High-quality test: Combined yield, boll and yarn tenacity data for Tifton, Ga., Florence, S.C., Rocky Mount, N.C., and Belle Mina, Ala., by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 7124-299	744 a	5.06 cde	39.0 defgh	9.8 f	151 bcd
La BD 434 RKR	723 a	5.63 ab	38.9 efghi	11.3 bcd	152 bcd
PD 5657	720 a	5.16 cd	40.6 b	10.4 ef	158 b
Stoneville 1181 ...	704 ab	4.75 e	37.5 j	11.3 bcd	150 bcd
Coker 76-110	698 abc	5.34 bc	41.8 a	11.2 bcd	133 gh
Stoneville 213	690 abcd	5.30 bc	38.9 efghi	10.8 de	132 h
Deltapine 7124-293	662 bcde	5.06 cde	40.4 bc	11.1 bcde	151 bcd
La BD 453 RKR	657 bcde	5.22 cd	39.3 defg	10.8 de	150 bcd
Coker 80903	654 bcdef	5.68 ab	39.6 cdef	11.1 bcde	144 def
Coker 76-114	644 cdef	5.37 bc	39.9 bcd	10.6 de	137 fgh
Delcot 311	642 cdef	5.95 a	38.6 fghi	11.2 bcd	152 bcd
Coker 310	635 defg	5.77 a	38.6 ghi	10.9 cde	147 cde
WM 53-3-31	630 efg	5.65 ab	39.1 defg	11.4 bc	139 fgh
WM 58-8-65	611 efgh	5.80 a	38.5 ghi	11.6 ab	140 efg
Stoneville 1366 ...	599 fgh	4.88 de	42.2 a	11.2 bcd	145 def
PD 5717	583 gh	4.90 de	39.7 bcde	10.8 de	154 bc
Mo. 73-1203	574 h	5.68 ab	38.1 hij	11.5 b	154 bc
Mo. 63-277-1B	572 h	5.36 bc	38.6 ghi	11.1 bcde	151 bcd
Acala SJ-5	473 i	5.96 a	38.0 ij	12.0 a	168 a

Table 129. High-quality test: Combined fiber data for Tifton, Ga., Florence, S.C., Rocky Mount, N.C., and Belle Mina, Ala., by cotton variety

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 7124-299	1.05 defgh	0.49 bc	206 bc	6.3 de	5.24 abc
La BD 434 RKR	1.07 bcdef	.49 bc	199 bcdef	6.2 de	4.85 efg
PD 5657	1.05 defg	.49 bc	196 bcdef	5.3 gh	4.88 efg
Stoneville 1181 ...	1.08 abcde	.50 bc	193 cdefg	5.2 h	5.31 ab
Coker 76-110	1.04 fg	.48 c	186 defg	7.0 bc	4.81 efg
Stoneville 213	1.05 efg	.49 bc	178 g	6.6 cd	5.22 abc
Deltapine 7124-293	1.07 abcde	.50 bc	201 bcde	6.1 def	5.02 bcdef
La BD 453 RKR	1.06 cdef	.51 b	203 bcd	7.2 b	5.10 bcde
Coker 80903	1.07 abcde	.50 bc	189 defg	5.4 gh	4.95 cdefg
Coker 76-114	1.05 defg	.49 bc	184 efg	5.5 gh	5.30 ab
Delcot 311	1.03 g	.50 b	200 bcdef	7.8 a	4.89 efg
Coker 310	1.09 abc	.50 bc	195 bcdefg	5.6 fgh	4.85 efg
WM 53-3-31	1.06 cdef	.50 bc	184 fg	7.7 a	5.20 abcd
WM 58-8-65	1.08 abcde	.50 bc	192 defg	7.8 a	5.06 bcde
Stoneville 1366 ...	1.08 abcd	.50 b	212 b	5.1 h	5.40 a
PD 5717	1.10 a	.49 bc	202 bcd	5.8 efg	5.10 bcde
Mo. 73-1203	1.08 abcd	.50 bc	200 bcdef	6.1 def	4.91 defg
Mo. 63-277-1B	1.08 abcd	.50 bc	202 bcd	6.3 de	4.71 g
Acala SJ-5	1.09 ab	.53 a	230 a	5.8 efg	4.72 fg

Variety	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Deltapine 7124-299	1.07 bcd	83.1 cdef	26.9 ab	71.8 ab	9.8 bcd
La BD 434 RKR	1.07 cd	83.2 bcdef	24.0 ef	73.4 a	9.6 bcd
PD 5657	1.05 de	83.0 def	25.6 bcde	69.8 abcd	9.4 cd
Stoneville 1181 ...	1.12 a	84.0 abcd	25.9 abcd	65.9 d	9.4 cd
Coker 76-110	1.07 bcd	83.4 bcdef	23.5 f	66.2 d	10.6 a
Stoneville 213	1.07 bcd	82.9 ef	23.9 ef	69.4 abcd	9.9 abcd
Deltapine 7124-293	1.09 abc	83.4 bcdef	26.0 abc	72.3 ab	9.2 d
La BD 453 RKR	1.07 bcd	84.1 abc	25.5 bcde	71.5 abc	10.0 abc
Coker 80903	1.09 abc	83.4 bcdef	24.1 def	69.4 abcd	9.9 abcd
Coker 76-114	1.07 bcd	83.2 bcdef	23.8 ef	68.9 abcd	10.0 abc
Delcot 311	1.02 e	83.8 abcde	24.2 cdef	69.1 abcd	9.9 abcd
Coker 310	1.10 abc	82.6 f	23.8 ef	71.0 abc	10.3 ab
WM 53-3-31	1.07 cd	83.1 cdef	22.5 f	69.9 abcd	9.5 cd
WM 58-8-65	1.10 ab	83.8 abcde	23.4 f	72.1 ab	9.7 bcd
Stoneville 1366 ...	1.12 a	84.1 abc	27.5 a	67.0 cd	9.5 cd
PD 5717	1.11 a	83.2 bcdef	27.1 ab	68.9 abcd	9.7 bcd
Mo. 73-1203	1.11 a	84.2 ab	24.4 cdef	68.6 bcd	10.3 ab
Mo. 63-277-1B	1.07 bcd	83.4 bcdef	23.2 f	69.2 abcd	9.7 bcd
Acala SJ-5	1.10 abc	84.5 a	27.1 ab	70.2 abcd	9.8 bcd

Table 130. High-quality test: Yield, boll and yarn tenacity data for St. Joseph, La.

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
La BD 453 RKR	1665 a	5.71	40.8	10.3	166
Coker 76-110	1605 ab	5.56	42.5	10.6	150
La BD 434 RKR	1574 ab	5.97	40.1	11.4	160
Deltapine 7124-299	1572 ab	5.30	41.2	9.6	170
Stoneville 213	1539 abc	5.56	41.1	10.6	147
Coker 76-114	1530 abc	5.82	41.1	10.5	164
Coker 80903	1490 abcd	5.89	42.6	11.0	168
Coker 310	1461 abcd	6.01	39.3	10.9	169
PD 5657	1443 abcd	5.44	41.7	10.0	174
WM 58-8-65	1413 bcd	5.88	40.3	11.4	152
Delcot 311	1403 bcd	5.95	38.8	11.5	170
Stoneville 1181 ...	1394 bcd	5.02	38.8	10.9	160
Stoneville 1366 ...	1374 bcd	5.15	42.3	10.7	161
Mo. 63-277-1B	1373 bcd	5.69	40.0	11.2	172
PD 5717	1373 bcd	5.39	41.6	10.3	174
WM 53-3-31	1320 cd	5.79	40.6	10.5	158
Deltapine 7124-293	1318 cd	5.14	44.7	10.1	156
Mo. 73-1203	1253 d	5.94	38.3	11.2	177
Acala SJ-5	912 e	5.93	39.3	11.8	168

Table 131. High-quality test: Fiber data for St. Joseph, La.

Location	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
La BD 453 RKR	1.10	0.52	205	6.8	4.65
Coker 76-110	1.12	.53	182	6.2	4.35
La BD 434 RKR	1.14	.53	198	6.3	4.50
Deltapine 7124-299	1.11	.53	210	5.8	4.70
Stoneville 213	1.08	.48	177	6.1	5.10
Coker 76-114	1.11	.52	182	5.0	4.95
Coker 80903	1.14	.52	186	5.2	4.15
Coker 310	1.18	.55	206	5.4	4.50
PD 5657	1.11	.54	206	5.9	4.30
WM 58-8-65	1.12	.52	176	7.0	4.60
Delcot 311	1.08	.52	208	7.4	4.25
Stoneville 1181 ...	1.12	.52	191	4.8	4.95
Stoneville 1366 ...	1.12	.51	198	4.8	4.95
Mo. 63-277-1B	1.15	.55	210	6.2	4.45
PD 5717	1.12	.52	206	5.6	4.60
WM 53-3-31	1.12	.52	184	7.4	4.40
Deltapine 7124-293	1.08	.48	182	5.6	5.05
Mo. 73-1203	1.16	.55	201	6.0	4.35
Acala SJ-5	1.10	.54	246	5.6	4.50

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
La BD 453 RKR	1.14	85.5	22.5	69.5	9.2
Coker 76-110	1.15	84.0	23.5	67.2	11.5
La BD 434 RKR	1.18	84.0	24.0	71.8	9.6
Deltapine 7124-299	1.11	84.0	26.0	71.5	10.5
Stoneville 213	1.12	84.5	22.0	69.5	10.9
Coker 76-114	1.12	83.5	23.0	72.8	11.5
Coker 80903	1.17	83.5	25.0	73.2	10.5
Coker 310	1.22	84.5	24.0	70.5	10.3
PD 5657	1.11	84.0	26.5	71.2	10.2
WM 58-8-65	1.15	84.5	23.5	69.0	9.2
Delcot 311	1.10	84.5	25.0	67.2	9.7
Stoneville 1181 ...	1.14	83.5	25.0	64.5	8.1
Stoneville 1366 ...	1.16	84.0	28.5	72.2	9.7
Mo. 63-277-1B	1.18	85.5	24.0	63.5	9.6
PD 5717	1.20	84.0	24.0	72.2	9.4
WM 53-3-31	1.14	84.0	21.5	71.8	8.7
Deltapine 7124-293	1.12	84.0	24.5	74.0	9.7
Mo. 73-1203	1.20	84.5	24.0	71.2	9.7
Acala SJ-5	1.13	85.0	27.5	72.2	10.0

Table 132.· High-quality test: Seed data for St. Joseph, La.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
La BD 453 RKR	20.4	3.14	1.02	11.3	4.5
Coker 76-110	20.9	3.34	.96	8.3	5.0
La BD 434 RKR	20.3	3.35	.97	10.0	4.5
Deltapine 7124-299	19.9	3.26	.78	9.6	5.0
Stoneville 213	18.8	3.27	.90	12.1	4.5
Coker 76-114	19.0	3.31	.87	9.3	5.0
Coker 80903	20.4	3.37	.81	11.3	4.0
Coker 310	19.2	3.33	.80	10.3	5.0
PD 5657	19.2	3.29	.87	11.8	5.0
WM 58-8-65	19.3	3.23	.77	14.6	5.0
Delcot 311	20.5	3.58	.89	8.7	5.0
Stoneville 1181 ...	18.5	3.34	.98	12.6	4.5
Stoneville 1366 ...	21.2	3.50	1.20	10.9	5.0
Mo. 63-277-1B	21.6	3.67	1.01	10.1	4.5
PD 5717	18.3	3.40	.80	14.6	3.5
WM 53-3-31	19.5	3.23	.85	13.1	5.0
Deltapine 7124-293	17.3	3.39	.56	10.4	5.0
Mo. 73-1203	20.6	3.53	1.08	11.6	4.0
Acala SJ-5	20.2	3.60	.56	8.9	4.0

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
La BD 453 RKR	92.3	107.2	1.015	1.5	9.6
Coker 76-110	99.1	112.4	1.012	4.3	9.9
La BD 434 RKR	102.5	114.9	1.002	1.8	10.3
Deltapine 7124-299	85.1	101.5	1.027	2.5	8.7
Stoneville 213	99.2	112.4	.993	3.5	9.3
Coker 76-114	96.1	110.1	1.020	2.3	9.7
Coker 80903	95.4	109.5	1.047	1.0	10.0
Coker 310	96.6	110.5	1.027	1.5	9.9
PD 5657	91.0	106.2	1.010	1.0	9.2
WM 58-8-65	98.6	114.4	1.001	3.5	9.9
Delcot 311	102.6	115.0	1.047	2.8	10.7
Stoneville 1181 ...	97.8	111.4	.985	3.8	9.9
Stoneville 1366 ...	99.2	113.6	1.005	4.0	10.0
Mo. 63-277-1B	91.3	106.4	1.106	1.8	10.0
PD 5717	88.3	104.0	1.031	1.8	9.1
WM 53-3-31	91.3	106.4	1.006	2.3	9.5
Deltapine 7124-293	91.6	106.6	.986	4.0	9.0
Mo. 73-1203	94.8	109.1	1.065	3.0	10.3
Acala SJ-5	107.5	118.7	1.029	1.0	11.1

Table 133. High-quality test: Yield, boll and yarn tenacity data for College Station, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
La BD 434 RKR	1282 a	4.81	38.4	10.3	152
Deltapine 7124-299	1254 ab	4.14	38.6	8.5	158
Stoneville 213	1095 abc	5.23	37.6	10.3	142
Stoneville 1181 ...	1065 abcd	4.02	36.3	10.2	156
La BD 453 RKR	1048 abcd	4.51	39.0	9.5	156
Coker 76-114	1030 bcd	4.50	38.1	9.8	154
Coker 310	1019 bcde	4.96	36.6	10.7	150
Delcot 311	982 cde	4.75	36.8	11.1	160
Coker 76-110	951 cde	4.44	39.7	11.0	143
Mo. 63-277-1B	942 cde	4.27	38.1	12.0	158
Mo. 73-1203	930 cde	4.98	36.5	11.1	159
WM 58-8-65	909 cde	5.24	35.6	11.7	155
WM 53-3-31	908 cde	4.55	37.5	11.2	149
PD 5657	879 cde	4.59	38.3	10.5	160
Coker 80903	861 cde	4.78	35.8	10.8	164
Deltapine 7124-293	847 cde	4.07	39.2	10.2	156
PD 5717	830 de	4.06	38.5	10.6	156
Stoneville 1366 ...	763 ef	3.48	41.3	11.1	177
Acala SJ-5	576 f	5.00	35.6	12.3	190

Table 134. High-quality test: Fiber data for College Station, Tex.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
La BD 434 RKR	1.14	0.55	205	6.0	4.25
Deltapine 7124-299	1.10	.54	213	5.6	5.05
Stoneville 213	1.12	.54	193	6.2	4.80
Stoneville 1181 ...	1.14	.55	205	4.5	4.80
La BD 453 RKR	1.11	.56	198	6.6	4.40
Coker 76-114	1.10	.52	218	5.3	4.70
Coker 310	1.12	.56	208	5.3	4.40
Delcot 311	1.12	.58	226	7.4	4.05
Coker 76-110	1.14	.55	206	6.9	4.10
Mo. 63-277-1B	1.16	.60	209	5.8	4.45
Mo. 73-1203	1.10	.58	212	7.2	3.85
WM 58-8-65	1.15	.58	205	6.2	4.60
WM 53-3-31	1.12	.60	201	6.6	4.85
PD 5657	1.12	.57	206	5.3	4.35
Coker 80903	1.14	.58	208	5.8	4.30
Deltapine 7124-293	1.13	.56	221	6.4	5.00
PD 5717	1.18	.58	218	5.3	4.30
Stoneville 1366 ...	1.20	.61	238	5.0	4.65
Acala SJ-5	1.17	.60	254	5.6	4.25

Variety	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
La BD 434 RKR	1.18	85.0	24.0	62.5	11.2
Deltapine 7124-299	1.09	84.0	27.5	66.8	11.4
Stoneville 213	1.14	83.5	24.0	63.5	11.5
Stoneville 1181 ...	1.18	85.5	25.0	63.2	10.6
La BD 453 RKR	1.10	83.5	24.0	65.5	11.6
Coker 76-114	1.11	84.0	24.5	56.0	10.8
Coker 310	1.12	84.0	24.5	61.5	11.2
Delcot 311	1.08	85.0	26.5	65.2	11.4
Coker 76-110	1.14	85.0	24.5	63.0	11.8
Mo. 63-277-1B	1.18	86.0	23.5	64.0	11.0
Mo. 73-1203	1.12	86.0	24.5	64.0	12.4
WM 58-8-65	1.16	85.0	24.0	62.5	11.0
WM 53-3-31	1.16	85.5	23.5	65.8	10.5
PD 5657	1.12	84.0	26.0	57.2	10.5
Coker 80903	1.14	84.5	26.0	66.0	11.1
Deltapine 7124-293	1.16	85.0	26.0	65.5	9.9
PD 5717	1.18	84.5	26.0	61.5	11.1
Stoneville 1366 ...	1.24	87.5	29.5	60.0	10.2
Acala SJ-5	1.17	86.5	27.5	62.2	11.0

Table 135. High-quality test: Yield, boll and yarn tenacity data for Portageville, Mo.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 7124-299	1095 a	4.80	40.4	9.1	145
La BD 434 RKR	991 ab	5.75	38.2	11.6	140
Mo. 63-277-1B	952 abc	5.25	39.4	11.2	144
Delcot 311	948 abc	5.55	39.0	11.2	144
Coker 76-110	917 bcd	4.50	41.7	10.5	133
Stoneville 1181 ...	892 bcd	3.95	37.4	10.1	134
Coker 76-114	873 bcd	4.80	40.4	10.2	126
Deltapine 7124-293	868 bcde	4.30	41.1	9.9	144
Coker 80903	846 bcdef	5.45	36.3	11.2	147
Stoneville 213	805 cdefg	5.95	38.3	11.5	140
PD 5657	800 cdefg	5.50	40.6	10.0	142
Coker 310	792 cdefg	4.95	39.8	9.8	120
La BD 453 RKR	786 cdefgh	4.90	38.6	10.7	136
Mo. 73-1203	753 defgh	4.95	35.8	12.0	142
WM 58-8-65	692 efgh	5.30	37.6	11.6	129
WM 53-3-31	684 fgh	5.50	38.5	11.1	116
PD 5717	682 fgh	4.90	39.1	10.4	148
Acala SJ-5	664 gh	5.55	39.2	11.9	164
Stoneville 1366 ...	614 h	4.30	43.5	10.8	156

Table 136. High-quality test: Fiber data for Portageville, Mo.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 7124-299	1.08	0.48	200	6.2	5.10
La BD 434 RKR	1.09	.48	194	6.2	4.95
Mo. 63-277-1B	1.10	.50	192	6.8	4.70
Delcot 311	1.08	.51	204	6.8	4.60
Coker 76-110	1.10	.50	190	6.6	4.85
Stoneville 1181 ...	1.12	.48	196	5.0	5.05
Coker 76-114	1.07	.47	186	5.3	5.00
Deltapine 7124-293	1.11	.48	194	5.3	4.70
Coker 80903	1.12	.49	198	5.2	4.45
Stoneville 213	1.12	.50	187	6.2	4.45
PD 5657	1.08	.48	192	6.3	4.75
Coker 310	1.08	.48	179	5.6	5.35
La BD 453 RKR	1.08	.48	190	6.6	4.85
Mo. 73-1203	1.18	.52	216	6.0	4.35
WM 58-8-65	1.14	.50	197	7.2	4.65
WM 53-3-31	1.12	.50	193	6.8	5.00
PD 5717	1.12	.46	201	5.5	4.75
Acala SJ-5	1.15	.51	225	5.6	4.60
Stoneville 1366 ...	1.14	.50	220	4.8	4.95

Variety	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Deltapine 7124-299	1.12	83.5	27.5	68.0	9.7
La BD 434 RKR	1.14	82.5	24.5	69.5	9.2
Mo. 63-277-1B	1.15	83.5	25.0	66.2	10.5
Delcot 311	1.09	84.0	25.0	69.0	10.0
Coker 76-110	1.10	83.0	25.0	66.8	9.8
Stoneville 1181 ...	1.16	82.0	25.0	65.0	9.3
Coker 76-114	1.08	81.5	25.0	63.8	10.5
Deltapine 7124-293	1.16	81.5	29.0	67.0	9.3
Coker 80903	1.16	82.0	26.5	67.0	9.7
Stoneville 213	1.18	82.0	26.0	62.0	8.0
PD 5657	1.12	82.5	27.0	65.0	9.8
Coker 310	1.08	82.5	24.0	68.5	9.5
La BD 453 RKR	1.08	82.0	25.5	66.2	9.6
Mo. 73-1203	1.21	84.0	25.5	61.8	9.6
WM 58-8-65	1.18	83.0	24.5	68.0	9.4
WM 53-3-31	1.14	82.0	23.0	67.5	9.8
PD 5717	1.17	82.0	28.0	67.8	10.0
Acala SJ-5	1.16	83.5	29.0	59.2	9.2
Stoneville 1366 ...	1.17	84.0	27.0	65.5	9.2

Table 137. High-quality test: Yield, boll and yarn tenacity data for Tifton, Ga.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
PD 5657	979 a	5.21	40.2	10.2	158
Coker 76-110	891 ab	5.92	39.6	11.7	137
La BD 434 RKR	880 abc	5.78	37.9	11.9	158
Stoneville 1181 ...	876 abcd	4.78	36.0	12.2	159
Deltapine 7124-299	846 abcd	5.15	35.6	10.2	150
Stoneville 213	810 abcd	5.62	37.3	11.8	137
WM 53-3-31	810 abcd	5.70	38.9	11.7	140
Coker 80903	805 abcd	5.96	38.9	11.7	142
La BD 453 RKR	796 abcd	4.96	39.4	11.3	155
PD 5717	775 bcd	5.04	38.7	11.4	154
Deltapine 7124-293	757 bcd	5.02	40.1	11.3	154
WM 58-8-65	740 bcd	6.06	36.5	12.1	139
Coker 310	730 bcd	6.05	37.6	10.7	151
Stoneville 1366 ...	729 bcd	4.80	41.1	10.9	152
Delcot 311	705 bcd	6.12	37.1	11.5	146
Coker 76-114	703 bcd	5.65	38.1	11.4	136
Mo. 63-277-1B	696 cd	5.37	36.5	11.6	156
Mo. 73-1203	691 d	5.89	36.7	11.7	156
Acala SJ-5	446 e	5.75	37.4	11.9	176

Table 138. High-quality test: Fiber data for Tifton, Ga.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
PD 5657	1.05	0.50	197	4.5	5.15
Coker 76-110	1.08	.51	199	6.8	4.65
La BD 434 RKR	1.10	.52	196	5.6	5.10
Stoneville 1181 ...	1.10	.52	182	4.4	5.30
Deltapine 7124-299	1.10	.51	211	5.8	5.50
Stoneville 213	1.10	.50	184	6.0	5.30
WM 53-3-31	1.06	.50	170	6.9	5.35
Coker 80903	1.08	.52	198	4.8	5.00
La BD 453 RKR	1.07	.52	201	6.7	5.30
PD 5717	1.12	.53	182	4.8	5.40
Deltapine 7124-293	1.10	.50	210	5.9	5.00
WM 58-8-65	1.10	.52	178	6.7	5.10
Coker 310	1.10	.52	192	4.7	5.00
Stoneville 1366 ...	1.10	.53	198	4.2	5.60
Delcot 311	1.02	.50	202	7.0	4.95
Coker 76-114	1.10	.52	196	5.0	5.40
Mo. 63-277-1B	1.10	.54	194	5.6	5.10
Mo. 73-1203	1.08	.50	207	5.2	5.15
Acala SJ-5	1.12	.54	236	5.6	4.80

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
PD 5657	1.05	84.0	26.0	68.2	8.9
Coker 76-110	1.09	84.5	23.5	68.0	9.6
La BD 434 RKR	1.08	84.0	24.5	72.2	8.4
Stoneville 1181 ...	1.17	85.0	26.0	64.0	8.7
Deltapine 7124-299	1.10	84.0	26.0	69.5	8.5
Stoneville 213	1.11	84.0	23.5	70.5	9.3
WM 53-3-31	1.08	84.5	22.5	63.2	7.9
Coker 80903	1.10	84.0	23.5	67.5	9.3
La BD 453 RKR	1.08	85.0	26.0	68.8	9.3
PD 5717	1.14	84.0	27.5	64.5	8.7
Deltapine 7124-293	1.12	84.5	27.0	71.8	7.7
WM 58-8-65	1.14	85.0	23.5	70.5	9.2
Coker 310	1.12	84.0	23.5	70.8	9.9
Stoneville 1366 ...	1.14	85.5	27.5	66.8	9.3
Delcot 311	1.03	85.0	24.0	70.0	9.4
Coker 76-114	1.13	84.5	24.0	69.8	9.3
Mo. 63-277-1B	1.10	84.5	24.0	69.5	9.0
Mo. 73-1203	1.13	86.0	24.5	61.2	9.4
Acala SJ-5	1.14	86.0	24.5	70.2	9.0

Table 139. High-quality test: Yield, boll and yarn tenacity data for Florence, S.C.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
La BD 434 RKR	876 a	6.55	42.1	10.3	136
Deltapine 7124-299	871 ab	6.19	42.2	9.3	138
PD 5657	818 abc	6.05	42.5	10.2	148
Coker 76-110	804 abcd	6.39	44.8	10.4	122
Stoneville 1181 ...	771 abcde	5.27	40.0	10.4	135
La BD 453 RKR	768 abcde	5.95	41.0	10.2	136
Stoneville 213	739 bcdef	5.87	41.9	10.0	122
Coker 310	739 bcdef	6.70	41.0	10.6	139
WM 58-8-65	719 cdef	6.23	42.6	11.0	134
Coker 80903	717 cdef	6.25	41.4	10.6	142
WM 53-3-31	716 cdef	6.31	42.4	10.5	138
Coker 76-114	704 cdef	5.51	42.3	9.3	128
Delcot 311	689 cdef	6.74	41.0	10.7	144
Deltapine 7124-293	680 cdef	5.82	42.8	10.5	136
Mo. 73-1203	665 def	6.43	39.8	11.1	148
PD 5717	658 ef	5.90	41.5	10.2	146
Mo. 63-277-1B	624 f	6.34	40.9	10.6	142
Stoneville 1366 ...	605 f	6.24	44.5	10.5	140
Acala SJ-5	487 g	6.77	39.4	11.5	150

Table 140. High-quality test: Fiber data for Florence, S.C.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
La BD 434 RKR	1.01	0.46	200	6.7	5.65
Deltapine 7124-299	.99	.46	190	6.4	6.00
PD 5657	1.01	.46	205	5.8	5.10
Coker 76-110	.98	.46	187	7.1	5.65
Stoneville 1181 ...	1.00	.46	190	5.4	5.80
La BD 453 RKR	1.00	.48	205	7.3	5.60
Stoneville 213	.96	.46	178	6.6	5.85
Coker 310	1.06	.49	200	5.8	5.45
WM 58-8-65	1.00	.48	194	8.2	5.85
Coker 80903	1.02	.46	184	5.6	5.20
WM 53-3-31	1.01	.49	182	8.5	5.80
Coker 76-114	.98	.46	182	5.6	5.75
Delcot 311	.98	.48	184	8.0	5.45
Deltapine 7124-293	.99	.47	186	5.8	5.70
Mo. 73-1203	1.06	.49	200	6.2	5.35
PD 5717	1.04	.46	205	6.0	5.40
Mo. 63-277-1B	1.00	.46	204	6.6	5.15
Stoneville 1366 ...	1.03	.48	214	5.6	5.75
Acala SJ-5	1.05	.52	232	6.2	5.25

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
La BD 434 RKR	0.99	82.5	24.0	69.8	8.7
Deltapine 7124-299	1.02	82.0	26.0	68.8	9.4
PD 5657	.98	81.5	25.0	68.2	8.8
Coker 76-110	1.02	82.0	23.0	69.0	10.4
Stoneville 1181 ...	1.06	83.0	26.5	61.2	8.9
La BD 453 RKR	1.01	82.5	25.0	67.8	9.7
Stoneville 213	1.00	82.0	23.0	66.8	9.7
Coker 310	1.06	81.0	24.0	67.8	9.3
WM 58-8-65	1.03	83.0	22.5	68.2	9.1
Coker 80903	1.04	82.0	24.5	66.8	9.5
WM 53-3-31	.99	82.5	20.5	68.8	9.7
Coker 76-114	.98	81.5	23.0	65.2	9.4
Delcot 311	.96	81.5	23.5	68.0	9.8
Deltapine 7124-293	1.02	82.0	23.0	67.2	9.8
Mo. 73-1203	1.06	82.5	24.0	68.8	9.6
PD 5717	1.08	83.0	27.5	66.0	9.1
Mo. 63-277-1B	.99	82.0	22.5	67.0	9.2
Stoneville 1366 ...	1.09	84.0	27.0	64.5	9.5
Acala SJ-5	1.03	82.0	29.0	66.8	9.5

Table 141. High-quality test: Seed data for Florence, S.C.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
La BD 434 RKR	18.5	3.94	0.85	9.9	5.5
Deltapine 7124-299	18.4	3.83	.93	11.7	5.0
PD 5657	17.1	3.77	.84	10.6	5.0
Coker 76-110	17.3	4.05	.81	8.9	5.0
Stoneville 1181 ...	16.6	3.73	.87	11.0	5.0
La BD 453 RKR	18.6	3.82	.91	11.3	5.0
Stoneville 213	15.8	3.80	.75	12.5	4.5
Coker 310	17.2	3.81	.75	12.2	4.0
WM 58-8-65	18.8	3.71	.76	8.4	5.5
Coker 80903	17.5	3.83	.80	12.1	5.0
WM 53-3-31	18.8	3.71	.91	8.7	6.0
Coker 76-114	16.7	3.72	.84	11.6	4.5
Delcot 311	17.9	4.07	.82	8.8	5.0
Deltapine 7124-293	16.7	3.87	.89	9.1	5.0
Mo. 73-1203	19.0	4.11	.96	11.4	4.5
PD 5717	17.2	3.85	.80	11.6	4.0
Mo. 63-277-1B	18.6	4.10	1.02	10.2	5.5
Stoneville 1366 ...	19.5	3.97	1.09	12.5	5.0
Acala SJ-5	17.6	3.91	.61	10.3	4.0

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
La BD 434 RKR	91.2	106.3	1.048	0.5	9.5
Deltapine 7124-299	77.0	95.0	1.082	.0	8.4
PD 5657	87.3	103.3	1.014	1.8	9.2
Coker 76-110	92.0	106.9	1.033	4.3	9.5
Stoneville 1181 ...	89.3	104.9	1.028	1.6	9.2
La BD 453 RKR	85.7	102.0	1.058	1.5	9.1
Stoneville 213	84.1	100.8	1.047	.8	9.3
Coker 310	87.7	103.6	1.067	.8	9.3
WM 58-8-65	96.5	110.4	1.015	1.3	9.8
Coker 80903	85.5	101.9	1.063	3.8	9.1
WM 53-3-31	94.7	109.0	1.018	1.0	9.6
Coker 76-114	81.0	98.2	1.061	1.0	8.6
Delcot 311	91.8	106.8	1.085	.8	10.0
Deltapine 7124-293	89.9	105.3	1.047	1.3	9.4
Mo. 73-1203	87.6	103.5	1.126	.8	9.8
PD 5717	85.4	101.8	1.078	1.8	9.2
Mo. 63-277-1B	85.9	102.2	1.108	2.8	9.5
Stoneville 1366 ...	86.8	102.8	1.070	1.5	9.3
Acala SJ-5	99.8	112.9	1.052	.8	10.5

Table 142. High-quality test: Yield, boll and yarn tenacity data for Belle Mina, Ala.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 7124-299	791 a	4.60	39.8	10.7	164
Deltapine 7124-293	764 ab	4.48	38.9	12.2	158
Stoneville 213	714 abc	4.70	37.4	12.3	133
Delcot 311	712 abc	5.40	37.7	12.7	164
La BD 434 RKR	701 bc	5.13	37.5	12.5	156
PD 5657	699 bc	4.60	38.7	11.8	174
Coker 76-114	679 cd	5.37	38.4	11.9	146
Stoneville 1181 ...	664 cd	4.29	35.7	12.9	160
La BD 453 RKR	650 cde	4.93	38.8	11.7	160
Coker 80903	640 cdef	5.09	37.3	12.6	150
Stoneville 1366 ...	617 defg	3.88	40.7	13.7	152
WM 53-3-31	599 defg	5.15	35.9	13.3	138
WM 58-8-65	581 efg	5.08	35.9	13.2	149
Coker 76-110	581 efg	4.09	39.7	13.5	146
Coker 310	573 efg	5.04	35.9	12.6	154
Mo. 73-1203	573 efg	4.81	36.5	13.1	166
PD 5717	561 fg	4.45	38.2	12.1	162
Mo. 63-277-1B	554 g	4.54	37.3	12.3	156
Acala SJ-5	434 h	5.00	36.5	13.5	168

Table 143. High-quality test: Fiber data for Belle Mina, Ala.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 7124-299	1.14	0.52	218	6.2	5.15
Deltapine 7124-293	1.16	.54	215	6.2	4.80
Stoneville 213	1.14	.53	187	7.0	5.15
Delcot 311	1.10	.54	210	7.8	4.70
La BD 434 RKR	1.13	.50	202	6.4	4.55
PD 5657	1.16	.55	210	5.8	4.85
Coker 76-114	1.12	.51	194	5.8	5.20
Stoneville 1181 ...	1.19	.55	206	5.8	5.25
La BD 453 RKR	1.13	.54	215	7.6	4.95
Coker 80903	1.16	.54	197	5.6	4.90
Stoneville 1366 ...	1.16	.52	234	5.6	5.05
WM 53-3-31	1.15	.52	193	8.0	5.00
WM 58-8-65	1.18	.54	190	7.6	4.75
Coker 76-110	1.14	.52	192	6.6	4.45
Coker 310	1.17	.53	208	5.4	4.55
Mo. 73-1203	1.16	.54	210	6.4	4.75
PD 5717	1.20	.54	218	5.8	4.95
Mo. 63-277-1B	1.15	.54	208	6.2	4.50
Acala SJ-5	1.16	.56	218	5.8	4.25

Variety	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Deltapine 7124-299	1.16	84.0	27.5	74.0	11.7
Deltapine 7124-293	1.20	83.5	28.0	76.2	10.3
Stoneville 213	1.19	84.0	25.5	68.2	10.6
Delcot 311	1.12	85.0	26.0	65.2	9.9
La BD 434 RKR	1.16	83.5	24.0	77.5	11.1
PD 5657	1.18	85.0	28.5	74.2	10.3
Coker 76-114	1.20	85.0	25.5	69.8	11.5
Stoneville 1181 ...	1.22	84.5	27.0	70.2	11.1
La BD 453 RKR	1.15	85.0	25.5	76.2	11.3
Coker 80903	1.20	83.5	27.0	73.2	11.3
Stoneville 1366 ...	1.24	84.5	30.5	65.8	9.5
WM 53-3-31	1.18	83.5	23.5	75.2	10.4
WM 58-8-65	1.20	84.0	25.0	78.8	10.5
Coker 76-110	1.21	85.0	26.0	64.8	12.1
Coker 310	1.22	84.0	24.0	73.2	11.5
Mo. 73-1203	1.22	85.0	25.5	72.2	11.6
PD 5717	1.18	84.0	28.0	74.5	10.7
Mo. 63-277-1B	1.18	84.5	24.5	72.2	10.7
Acala SJ-5	1.19	85.5	27.0	69.5	10.8

Table 144. High-quality test: Seed data for Belle Mina, Ala.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 7124-299	18.4	3.54	0.76	11.5	3.5
Deltapine 7124-293	16.9	3.53	.59	13.1	4.0
Stoneville 213	15.6	3.31	.65	17.0	3.0
Delcot 311	18.6	3.70	.76	11.8	4.5
La BD 434 RKR	18.1	3.38	.71	13.4	4.0
PD 5657	18.4	3.45	.71	13.4	4.5
Coker 76-114	17.4	3.41	.72	12.7	4.0
Stoneville 1181 ...	16.9	3.40	.59	13.9	3.0
La BD 453 RKR	18.6	3.53	.72	13.5	4.5
Coker 80903	19.2	3.60	.69	15.0	4.0
Stoneville 1366 ...	19.8	3.75	.95	11.9	4.0
WM 53-3-31	17.6	3.26	.68	15.1	3.5
WM 58-8-65	17.5	3.25	.59	14.7	4.0
Coker 76-110	18.5	3.76	.80	18.7	5.0
Coker 310	17.9	3.51	.64	8.3	4.0
Mo. 73-1203	19.6	3.81	.86	13.3	4.5
PD 5717	17.8	3.52	.65	14.3	3.0
Mo. 63-277-1B	19.8	3.72	.85	12.2	4.5
Acala SJ-5	18.9	3.63	.49	11.9	3.5

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Deltapine 7124-299	90.1	105.5	1.052	4.0	9.5
Deltapine 7124-293	105.3	117.0	1.009	2.5	10.6
Stoneville 213	103.4	115.6	.984	1.5	10.2
Delcot 311	103.0	115.3	1.084	.3	11.1
La BD 434 RKR	105.9	117.5	1.026	1.5	10.9
PD 5657	97.0	110.7	1.054	2.5	10.2
Coker 76-114	99.5	112.7	1.047	.3	10.4
Stoneville 1181 ...	113.8	123.2	.976	1.3	11.1
La BD 453 RKR	99.8	112.9	1.068	2.0	10.7
Coker 80903	99.7	112.9	1.073	2.5	10.7
Stoneville 1366 ...	110.5	120.8	1.012	3.8	11.7
WM 53-3-31	108.9	119.7	1.021	.8	11.1
WM 58-8-65	113.5	123.1	.995	2.3	11.3
Coker 76-110	104.3	116.2	1.058	2.3	11.1
Coker 310	112.5	122.3	1.030	1.0	11.8
Mo. 73-1203	109.1	119.8	1.046	1.8	11.4
PD 5717	97.9	111.4	1.058	2.8	10.3
Mo. 63-277-1B	97.6	111.3	1.096	2.3	10.7
Acala SJ-5	116.7	125.3	1.020	1.5	11.9

Table 145. High-quality test: Yield, boll and yarn tenacity data for Stoneville, Miss.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
La BD 434 RKR	783 a	5.29	39.5	10.4	144
Deltapine 7124-299	751 a	4.03	39.5	8.9	144
Stoneville 1181 ...	710 ab	3.74	38.0	9.4	149
Stoneville 213	688 ab	4.64	40.5	9.3	140
WM 58-8-65	679 abc	5.34	40.7	10.5	134
Deltapine 7124-293	676 abc	4.41	41.8	9.1	156
La BD 453 RKR	605 bcd	4.71	39.0	9.7	147
WM 53-3-31	560 cde	5.08	40.4	10.2	144
Coker 76-114	500 def	4.51	39.2	9.5	143
Coker 76-110	498 def	4.83	41.2	10.3	138
Coker 80903	486 def	4.96	37.5	10.8	152
Coker 310	479 def	4.80	37.2	9.9	158
PD 5657	463 ef	4.53	39.5	9.5	152
Stoneville 1366 ...	454 ef	4.47	41.8	10.0	162
Mo. 73-1203	431 ef	4.96	36.2	11.4	152
PD 5717	419 f	4.32	39.8	9.8	160
Acala SJ-5	409 f	5.56	38.4	11.2	176
Delcot 311	376 f	5.05	37.3	10.7	160
Mo. 63-277-1B	368 f	4.43	37.3	10.0	160

Table 146. High-quality test: Fiber data for Stoneville, Miss.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
La BD 434 RKR	1.07	0.47	197	5.6	4.95
Deltapine 7124-299	1.05	.47	198	5.4	5.25
Stoneville 1181 ...	1.05	.48	178	4.7	5.20
Stoneville 213	1.03	.48	176	5.4	5.30
WM 58-8-65	1.07	.50	194	6.7	5.30
Deltapine 7124-293	1.06	.46	184	5.4	5.05
La BD 453 RKR	1.05	.47	204	6.6	4.85
WM 53-3-31	1.05	.46	190	6.8	5.20
Coker 76-114	1.06	.48	180	4.7	4.95
Coker 76-110	1.03	.48	204	5.4	5.05
Coker 80903	1.10	.48	206	4.8	4.75
Coker 310	1.10	.48	188	5.4	4.65
PD 5657	1.03	.48	200	5.1	5.10
Stoneville 1366 ...	1.06	.50	203	4.4	5.60
Mo. 73-1203	1.10	.49	200	5.5	4.55
PD 5717	1.06	.48	211	5.4	5.10
Acala SJ-5	1.08	.50	218	5.4	4.90
Delcot 311	1.04	.50	202	7.3	4.35
Mo. 63-277-1B	1.04	.48	192	5.8	4.70

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
La BD 434 RKR	1.12	81.5	22.0	68.0	8.2
Deltapine 7124-299	1.07	82.0	25.0	66.0	8.3
Stoneville 1181 ...	1.10	82.0	23.0	60.5	8.5
Stoneville 213	1.04	81.0	20.5	64.5	8.7
WM 58-8-65	1.12	82.0	21.5	62.0	7.8
Deltapine 7124-293	1.08	82.0	23.5	63.8	8.1
La BD 453 RKR	1.06	82.0	22.0	64.8	7.7
WM 53-3-31	1.07	80.5	21.0	66.8	8.0
Coker 76-114	1.05	80.0	22.5	64.2	8.8
Coker 76-110	1.02	81.0	22.5	65.2	9.4
Coker 80903	1.12	80.5	23.5	59.8	8.9
Coker 310	1.10	81.0	21.5	64.0	8.0
PD 5657	1.04	81.0	24.0	63.8	8.8
Stoneville 1366 ...	1.12	83.5	25.0	63.8	8.2
Mo. 73-1203	1.15	83.5	22.5	63.8	8.8
PD 5717	1.10	81.5	25.5	59.8	9.4
Acala SJ-5	1.12	83.5	24.0	57.8	9.0
Delcot 311	1.04	82.0	25.5	60.8	8.7
Mo. 63-277-1B	1.08	81.5	23.5	64.8	8.4

Table 147. High-quality test: Yield, boll and yarn tenacity data for Jackson, Tenn.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 7124-299	698 a	4.74	35.2	9.6	167
Stoneville 1181 ...	664 ab	4.62	31.3	10.7	165
Stoneville 213	639 abc	5.05	33.8	10.2	151
La BD 453 RKR	629 abcd	4.69	32.7	10.4	168
La BD 434 RKR	607 bcde	5.47	31.2	11.6	164
Deltapine 7124-293	595 bcde	4.52	35.5	9.9	166
Coker 76-114	594 bcde	4.93	35.0	10.0	156
WM 53-3-31	593 bcdef	5.62	34.7	11.8	152
Coker 80903	583 cdefg	5.58	34.5	11.0	165
Coker 76-110	580 cdefg	5.49	37.4	10.3	130
WM 58-8-65	564 cdefgh	5.60	33.2	10.8	149
PD 5657	558 defgh	5.36	35.5	10.9	154
Delcot 311	547 efgh	6.16	32.1	11.8	155
Stoneville 1366 ...	536 efghi	4.50	39.0	10.6	154
Mo. 63-277-1B	518 fghi	5.49	33.9	11.5	154
Mo. 73-1203	512 ghi	5.84	34.1	11.7	160
Acala SJ-5	492 hij	4.99	33.3	11.6	183
Coker 310	473 ij	4.58	33.5	11.2	163
PD 5717	435 j	4.84	36.2	10.0	167

Table 148. High-quality test: Fiber data for Jackson, Tenn.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 7124-299	1.11	0.52	208	5.9	4.85
Stoneville 1181 ...	1.15	.52	210	5.0	4.45
Stoneville 213	1.14	.52	194	5.7	4.40
La BD 453 RKR	1.16	.53	222	7.4	4.25
La BD 434 RKR	1.16	.54	218	6.2	4.20
Deltapine 7124-293	1.16	.52	216	5.8	4.20
Coker 76-114	1.15	.54	202	5.1	4.30
WM 53-3-31	1.18	.56	200	7.6	4.45
Coker 80903	1.16	.54	214	5.0	4.15
Coker 76-110	1.09	.51	192	6.4	4.15
WM 58-8-65	1.15	.54	206	6.7	4.50
PD 5657	1.14	.54	207	5.0	4.45
Delcot 311	1.12	.55	229	7.6	3.95
Stoneville 1366 ...	1.14	.54	207	4.6	5.15
Mo. 63-277-1B	1.14	.55	209	6.4	4.00
Mo. 73-1203	1.14	.54	214	5.6	4.35
Acala SJ-5	1.18	.56	252	6.0	3.90
Coker 310	1.18	.54	211	5.6	4.00
PD 5717	1.15	.54	214	5.2	4.65

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Deltapine 7124-299	1.15	84.0	28.5	64.5	11.7
Stoneville 1181 ...	1.18	81.5	29.0	71.5	12.3
Stoneville 213	1.20	84.5	24.5	73.8	12.7
La BD 453 RKR	1.22	84.0	28.5	66.5	12.1
La BD 434 RKR	1.18	83.0	28.5	66.0	10.9
Deltapine 7124-293	1.20	83.0	30.5	75.2	11.1
Coker 76-114	1.19	84.5	26.0	70.0	12.4
WM 53-3-31	1.20	84.0	25.0	70.2	12.6
Coker 80903	1.19	83.5	25.5	69.5	12.1
Coker 76-110	1.12	84.5	23.0	73.0	12.7
WM 58-8-65	1.18	84.0	25.5	73.0	11.8
PD 5657	1.17	84.0	25.5	71.2	11.2
Delcot 311	1.08	84.0	26.0	73.2	11.8
Stoneville 1366 ...	1.16	84.5	28.0	71.2	11.6
Mo. 63-277-1B	1.14	84.0	24.5	64.5	12.2
Mo. 73-1203	1.15	84.5	24.5	72.5	12.1
Acala SJ-5	1.16	83.0	30.5	72.0	11.5
Coker 310	1.24	84.5	25.5	70.0	11.9
PD 5717	1.19	84.5	27.5	74.2	11.4

Table 149. High-quality test: Yield, boll and yarn tenacity data for Rocky Mount, N.C.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 1181 ...	579 a	4.66	38.1	9.9	144
Coker 76-110	573 a	4.98	43.1	9.3	125
Stoneville 213	566 ab	5.02	39.2	9.1	136
Deltapine 7124-299	535 abc	4.30	38.5	9.1	152
Coker 76-114	531 abcd	4.96	40.9	9.4	138
Deltapine 7124-293	529 abcd	4.94	40.0	10.0	154
Coker 80903	525 abcde	5.42	40.7	9.7	141
Coker 310	525 abcde	5.29	39.8	9.7	145
Delcot 311	517 bcde	5.55	38.9	10.0	154
Stoneville 1366 ...	517 bcde	4.60	42.8	9.9	134
PD 5657	507 cdef	4.78	40.9	9.4	150
La BD 434 RKR	506 cdef	5.05	38.4	10.3	156
Acala SJ-5	499 cdef	6.31	38.8	11.2	178
La BD 453 RKR	482 cdef	5.03	38.0	9.8	148
WM 53-3-31	475 defg	5.45	39.1	10.2	140
Mo. 63-277-1B	470 efg	5.18	39.8	10.1	150
WM 58-8-65	458 fg	5.84	39.1	10.2	140
PD 5717	427 g	4.21	40.4	9.6	152
Mo. 73-1203	427 g	5.59	39.4	10.1	148

Table 150. High-quality test: Fiber data for Rocky Mount, N.C.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 1181 ...	1.02	0.47	194	5.4	4.90
Coker 76-110	.96	.44	168	7.4	4.50
Stoneville 213	.99	.46	165	6.8	4.60
Deltapine 7124-299	1.00	.48	207	7.0	4.30
Coker 76-114	1.01	.46	164	5.6	4.85
Deltapine 7124-293	1.03	.48	192	6.6	4.60
Coker 80903	1.02	.48	177	5.4	4.70
Coker 310	1.02	.47	180	6.4	4.40
Delcot 311	1.01	.50	205	8.2	4.45
Stoneville 1366 ...	1.03	.48	200	4.8	5.20
PD 5657	1.00	.44	172	5.2	4.40
La BD 434 RKR	1.02	.46	198	6.2	4.10
Acala SJ-5	1.04	.52	234	5.6	4.60
La BD 453 RKR	1.04	.50	190	7.4	4.55
WM 53-3-31	1.02	.47	188	7.5	4.65
Mo. 63-277-1B	1.05	.46	201	6.7	4.10
WM 58-8-65	1.03	.44	208	8.6	4.55
PD 5717	1.02	.44	200	6.6	4.65
Mo. 73-1203	1.03	.48	182	6.5	4.40

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Stoneville 1181 ...	1.02	83.5	24.0	68.2	8.8
Coker 76-110	.97	82.0	21.5	63.0	10.3
Stoneville 213	1.00	81.5	23.5	72.0	10.1
Deltapine 7124-299	1.00	82.5	28.0	75.0	9.4
Coker 76-114	.98	82.0	22.5	70.8	9.7
Deltapine 7124-293	1.02	83.5	26.0	74.0	8.8
Coker 80903	1.02	84.0	21.5	70.2	9.4
Coker 310	1.00	81.5	23.5	72.2	10.4
Delcot 311	1.00	83.5	23.5	73.0	10.4
Stoneville 1366 ...	1.01	82.5	25.0	71.0	9.6
PD 5657	.98	81.5	23.0	68.2	9.4
La BD 434 RKR	1.04	83.0	23.5	74.0	10.0
Acala SJ-5	1.02	84.5	28.0	74.2	9.8
La BD 453 RKR	1.04	84.0	25.5	73.2	9.5
WM 53-3-31	1.02	82.0	23.5	72.5	9.9
Mo. 63-277-1B	1.01	82.5	22.0	68.2	9.8
WM 58-8-65	1.04	83.0	22.5	70.8	9.8
PD 5717	1.04	82.0	25.5	70.8	10.1
Mo. 73-1203	1.04	83.5	23.5	72.0	10.6

PIMA REGIONAL COTTON VARIETY TEST

Table 151. Pima test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-34	1084 a	3.36 d	39.2 a	12.8 ab	208 bc
P-45	1079 a	3.06 e	36.4 de	11.2 i	213 a
P-43	1043 ab	3.59 ab	36.2 ef	13.0 a	204 cd
P-48	1039 ab	3.46 bcd	38.3 b	12.6 cd	211 ab
Pima S-5	1014 bc	3.69 a	37.9 c	12.2 fg	199 e
P-47	1008 bc	3.49 bcd	36.0 f	12.4 de	212 a
P-42	991 cd	3.44 bcd	37.8 c	11.8 h	202 de
P-44	981 cde	3.18 e	35.7 g	11.6 h	199 e
E-16	972 cde	3.46 bcd	36.3 de	12.7 g	204 cd
E-15	954 def	3.49 bcd	36.5 d	12.1 fg	202 de
P-46	935 ef	3.16 e	35.0 i	12.3 ef	208 bc
P-49	924 f	3.58 abc	35.7 g	12.7 bc	194 f
E-14	862 g	3.44 cd	35.2 h	12.8 ab	191 f
P-50	833 g	3.49 bcd	34.3 j	12.6 c	200 de

Table 152. Pima test: Fiber data by cotton variety

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-34	1.39 h	0.70 cdef	292 bc	7.1 bcd	4.63 ab
P-45	1.44 b	.71 abc	303 a	6.9 cde	4.48 bc
P-43	1.41 efg	.70 bcde	290 bcd	7.3 ab	4.52 bc
P-48	1.43 bcde	.72 a	293 b	7.0 bcde	4.13 ef
Pima S-5	1.40 gh	.69 efg	282 de	7.4 a	4.38 cd
P-47	1.42 defg	.71 abc	304 a	6.9 cde	4.70 a
P-42	1.45 a	.71 ab	277 ef	7.4 a	4.24 de
P-44	1.40 gh	.68 g	271 f	6.8 de	4.30 d
E-16	1.42 bcdef	.69 defg	293 b	6.7 e	4.04 f
E-15	1.41 fg	.69 efg	280 e	7.0 bcde	4.14 ef
P-46	1.44 bc	.71 abc	291 bc	6.9 cde	4.28 de
P-49	1.42 cdef	.70 cdef	279 ef	7.4 a	4.51 bc
E-14	1.43 bcde	.68 fg	276 ef	7.2 abc	4.46 c
P-50	1.43 bcd	.70 abcd	283 cde	7.4 a	4.24 de

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
P-34	1.38 a	87.0 a	40.4 ab	63.0 d	13.0 a
P-45	1.36 a	85.5 abc	39.8 abc	64.8 abcd	11.6 d
P-43	1.32 abc	86.7 ab	37.4 cd	65.1 abc	12.2 bc
P-48	1.40 a	86.7 ab	36.8 d	66.8 a	11.9 cd
Pima S-5	1.34 ab	85.2 bc	38.0 bcd	66.1 ab	12.1 bcd
P-47	1.37 a	86.8 ab	41.0 a	64.9 abcd	12.1 bcd
P-42	1.22 c	85.0 bc	39.4 abc	65.5 abc	12.3 bc
P-44	1.37 a	84.6 c	38.6 abcd	65.7 abc	12.2 bc
E-16	1.31 abc	85.4 abc	39.8 abc	65.8 abc	12.5 b
E-15	1.38 a	85.4 abc	37.4 cd	64.0 bcd	12.1 bcd
P-46	1.35 a	84.6 c	37.7 cd	66.0 abc	12.3 bc
P-49	1.38 a	84.8 c	39.6 abc	63.9 cd	12.3 bc
E-14	1.25 bc	84.8 c	41.0 a	64.1 bcd	12.4 bc
P-50	1.35 ab	85.4 abc	39.9 abc	65.6 abc	12.2 bcd

Table 153. Pima test: Seed data by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-34	22.2 g	3.42 bcde	0.71 fg	1.74 g	12.3 a
P-45	22.4 efg	3.31 f	.90 ab	2.81 bcd	11.4 ef
P-43	24.2 a	3.40 cdef	.82 cd	3.06 abc	11.2 g
P-48	21.4 h	3.42 bcde	.65 g	2.25 defg	11.8 bcd
Pima S-5	23.4 b	3.44 abcd	.80 de	2.05 fg	11.9 bc
P-47	22.4 fg	3.40 def	.80 de	2.68 cde	11.8 bcd
P-42	22.7 def	3.32 f	.74 ef	3.46 a	11.6 def
P-44	22.1 g	3.49 abcd	.92 a	3.35 ab	11.3 fg
E-16	23.2 bc	3.52 ab	.96 a	2.55 cdef	11.7 cd
E-15	22.9 cd	3.53 a	.91 a	2.23 defg	11.7 cde
P-46	22.6 def	3.34 ef	.80 de	2.17 efg	12.0 b
P-49	22.1 g	3.44 abcd	.83 bcd	2.87 abc	11.6 def
E-14	22.8 cde	3.46 abcd	.88 abc	3.13 abc	11.6 def
P-50	22.9 cd	3.50 abc	.80 de	2.68 cde	11.8 bcd

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
P-34	129.0 a	133.9 a	1.000 bcd	3.1 bc	12.8 a
P-45	115.0 f	124.0 h	.978 ef	1.7 d	11.2 g
P-43	127.6 a	132.9 ab	1.008 abc	1.5 d	12.8 a
P-48	129.5 a	134.2 a	.974 f	5.6 a	12.6 ab
Pima S-5	123.5 bc	130.1 bc	.998 de	3.2 bc	12.2 de
P-47	122.6 cd	129.4 def	1.006 abc	2.3 cd	12.3 bcde
P-42	119.1 e	126.9 g	.979 ef	3.9 b	11.6 f
P-44	113.6 f	123.0 h	1.011 ab	3.4 b	11.4 fg
E-16	119.9 de	127.5 fg	1.010 abc	2.1 cd	12.1 e
E-15	120.6 cde	128.2 efg	1.020 a	1.8 d	12.2 cde
P-46	126.8 ab	131.0 bcd	.981 ef	3.1 bc	12.4 bcd
P-49	128.5 a	133.4 a	.996 cd	1.9 d	12.6 ab
E-14	126.5 ab	131.9 abc	1.008 abc	1.4 d	12.7 a
P-50	123.9 bc	130.4 cde	1.017 a	2.2 cd	12.5 abc

Table 154. Pima test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Safford, Ariz. (Curtis farm) ...	1210 a	3.31 c	38.3 a	11.4 g	199 c
Wenden, Ariz.	1173 a	3.31 c	35.8 d	12.4 bc	209 a
Salome, Ariz.	1092 b	3.21 cd	36.9 c	11.8 f	208 a
Fabens, Tex.	1054 b	3.59 b	38.1 a	12.3 cd	194 d
Marana, Ariz. (Station)	1054 b	3.62 b	37.0 c	12.1 e	208 a
Phoenix, Ariz.	1037 b	3.08 d	33.8 g	12.1 de	207 a
Marana, Ariz. (Clark farm)	841 c	3.98 a	34.5 f	14.0 a	203 b
Coolidge, Ariz. ...	806 c	3.04 d	35.0 e	12.1 de	207 a
Safford, Ariz. (Layton farm) ...	785 c	3.50 b	37.6 b	12.4 bc	202 b
El Paso, Tex.	675 d	3.55 b	37.6 b	12.6 b	196 cd

Table 155. Pima test: Fiber data by test location

Location	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Safford, Ariz. (Curtis farm) ...	1.38 d	0.67 e	279 cd	7.1 cd	4.32 bc
Wenden, Ariz.	1.43 b	.70 bc	290 abc	6.8 ef	4.23 cd
Salome, Ariz.	1.42 b	.70 bc	296 a	6.6 f	4.35 bc
Fabens, Tex.	1.40 c	.69 cd	278 d	7.7 a	4.38 abc
Marana, Ariz. (Station)	1.43 b	.72 a	293 a	6.8 ef	4.47 ab
Phoenix, Ariz.	1.39 cd	.68 d	277 d	7.2 cd	4.38 abc
Marana, Ariz. (Clark farm)	1.46 a	.73 a	281 bcd	7.2 cd	4.57 a
Coolidge, Ariz. ...	1.43 b	.69 bcd	296 a	7.3 bc	4.11 d
Safford, Ariz. (Layton farm) ...	1.43 b	.70 b	291 ab	7.0 de	4.41 abc
El Paso, Tex.	1.43 b	.70 bc	288 abcd	7.5 ab	4.41 abc

Location	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
Safford, Ariz. (Curtis farm) ...	1.37 a	84.9 bc	39.0 bc	65.6 ab	12.6 a
Wenden, Ariz.	1.37 a	85.5 abc	37.9 cd	65.9 ab	12.1 bc
Salome, Ariz.	1.39 a	85.3 bc	40.2 ab	65.9 ab	12.4 abc
Fabens, Tex.	1.36 a	86.5 a	38.6 bcd	64.9 abc	12.3 abc
Marana, Ariz. (Station)	1.33 ab	86.0 ab	36.8 d	62.9 c	12.1 bc
Phoenix, Ariz.	1.38 a	86.5 a	38.4 bcd	66.2 a	12.0 bc
Marana, Ariz. (Clark farm)	1.24 b	84.6 c	37.8 cd	63.8 bc	12.0 bc
Coolidge, Ariz. ...	1.34 a	84.9 bc	41.1 a	64.9 abc	12.1 bc
Safford, Ariz. (Layton farm) ...	1.31 ab	85.8 ab	41.4 a	65.7 ab	12.5 ab
El Paso, Tex.	1.31 ab	85.4 abc	39.2 bc	65.1 ab	12.2 abc

Table 156. Pima test: Seed data by test location

Location	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Safford, Ariz. (Curtis farm) ...	22.6 cd	3.37 d	0.87 bc	1.48 de	11.5 b
Wenden, Ariz.	22.4 de	3.46 c	.85 cd	3.17 c	11.4 b
Salome, Ariz.	23.0 b	3.25 ef	.80 d	3.71 b	11.5 b
Fabens, Tex.	22.1 e	3.60 b	.87 bc	1.91 d	11.9 a
Marana, Ariz. (Station)	23.7 a	3.18 f	.96 a	2.92 c	11.8 a
Phoenix, Ariz.	22.8 bcd	3.68 a	.41 e	4.90 a	11.1 c
Marana, Ariz. (Clark farm)	23.4 a	3.55 b	.98 a	1.40 e	12.1 a
Coolidge, Ariz. ...	21.7 f	3.41 cd	.81 cd	3.78 b	11.5 b
Safford, Ariz. (Layton farm) ...	22.8 bc	3.29 e	.81 cd	1.77 de	11.8 a
El Paso, Tex.	22.1 e	3.47 c	.89 b	1.45 de	12.0 a

Location	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
Safford, Ariz. (Curtis farm) ...	121.4 d	128.6 d	0.961 d	2.8 ab	11.6 e
Wenden, Ariz.	118.3 e	125.9 e	1.022 c	2.7 ab	12.1 cd
Salome, Ariz.	111.8 g	121.5 g	1.040 b	1.9 bc	11.6 e
Fabens, Tex.	130.4 c	134.9 c	.933 e	2.8 ab	12.2 cd
Marana, Ariz. (Station)	116.1 ef	125.1 ef	1.040 b	1.7 c	12.0 d
Phoenix, Ariz.	115.3 f	123.7 f	1.041 ab	2.7 ab	12.0 d
Marana, Ariz. (Clark farm)	132.1 bc	136.1 bc	1.051 a	1.9 bc	13.8 a
Coolidge, Ariz. ...	115.5 ef	124.4 ef	1.041 ab	3.7 a	12.0 d
Safford, Ariz. (Layton farm) ...	133.8 b	137.2 b	.932 e	3.3 a	12.3 c
El Paso, Tex.	137.5 a	139.8 a	.925 e	3.1 a	12.7 b

Table 157. Pima test: Combined yield, boll and yarn tenacity data for Phoenix, Marana (Station and Clark farm), Coolidge, Salome, and Wenden, Ariz., by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-43	1136 a	3.65 ab	35.4 d	13.2 a	206 def
P-45	1136 a	2.99 f	35.5 d	11.2 f	217 a
P-34	1134 a	3.34 de	38.2 a	12.8 b	211 bcd
P-48	1122 a	3.47 cde	37.4 b	12.6 c	215 ab
P-42	1091 a	3.44 cde	36.9 c	11.9 d	204 ef
Pima S-5	1075 ab	3.72 a	37.0 c	12.5 c	202 fg
P-47	1020 bc	3.52 bc	34.9 e	12.6 c	217 a
P-44	1006 c	3.14 f	34.7 ef	11.7 e	202 efg
P-46	987 c	3.10 f	34.2 g	12.4 c	212 abc
E-16	982 c	3.33 de	35.5 d	12.1 d	208 cde
E-15	970 c	3.38 cde	35.7 d	12.1 d	206 def
P-49	887 d	3.49 bcd	34.4 fg	12.9 b	198 gh
E-14	829 d	3.30 e	34.2 g	12.9 b	194 h
P-50	765 e	3.35 cde	33.2 h	12.9 b	206 def

Table 158. Pima test: Combined fiber data for Phoenix, Marana (Station and Clark farm), Coolidge, Salome, and Wenden, Ariz., by cotton variety

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-43	1.42 bc	0.71 abcde	292 abc	7.1 abc	4.49 abc
P-45	1.44 ab	.71 abcd	306 a	6.8 cde	4.49 abc
P-34	1.40 d	.71 abcde	294 ab	6.8 cde	4.55 ab
P-48	1.43 b	.72 a	296 ab	7.0 abcd	4.10 fg
P-42	1.45 a	.72 ab	278 cd	7.3 ab	4.39 bcd
Pima S-5	1.41 cd	.70 cdef	282 bcd	7.4 a	4.40 bcd
P-47	1.43 bc	.72 ab	305 a	6.9 bcde	4.62 a
P-44	1.40 d	.69 ef	274 d	6.7 de	4.31 cde
P-46	1.44 ab	.71 abc	294 ab	6.8 cde	4.18 efg
E-16	1.43 bc	.69 def	294 ab	8.6 e	4.05 g
E-15	1.41 cd	.69 def	284 bcd	6.7 cde	4.12 fg
P-49	1.42 bc	.70 bcdef	283 bcd	7.2 abc	4.52 ab
E-14	1.43 bc	.68 f	277 d	7.1 abc	4.42 bcd
P-50	1.44 ab	.71 abcd	286 bcd	7.2 ab	4.27 def

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
P-43	1.32 ab	86.7 a	38.0 abc	65.0 abc	12.1 bc
P-45	1.36 a	85.7 ab	37.8 bc	64.1 abc	11.3 c
P-34	1.39 a	86.8 a	40.2 ab	63.2 c	12.9 a
P-48	1.39 a	86.2 ab	36.0 c	66.8 a	11.8 bc
P-42	1.21 b	84.8 ab	38.5 abc	65.0 abc	12.1 bc
Pima S-5	1.36 a	85.2 ab	39.2 ab	66.5 a	12.1 bc
P-47	1.37 a	86.9 a	40.9 a	64.5 abc	12.0 bc
P-44	1.36 a	84.8 ab	38.8 abc	66.4 ab	12.0 bc
P-46	1.35 ab	84.0 b	38.1 abc	65.8 abc	12.0 bc
E-16	1.38 a	85.7 ab	38.6 abc	65.6 abc	12.4 ab
E-15	1.39 a	85.5 ab	37.6 bc	64.0 abc	12.2 ab
P-49	1.39 a	84.9 ab	39.5 ab	63.6 bc	12.2 ab
E-14	1.24 ab	85.0 ab	40.3 ab	63.6 bc	12.3 ab
P-50	1.32 ab	84.6 ab	38.6 abc	65.3 abc	12.1 bc

Table 159. Pima test: Combined seed data for Phoenix, Marana (Station and Clark farm), Coolidge, Salome, and Wenden, Ariz., by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-43	24.7 a	3.40 bcd	0.81 bcd	3.64 abcd	11.2 d
P-45	22.9 cd	3.26 d	.88 ab	3.51 bcd	11.3 cd
P-34	22.6 def	3.36 bcd	.70 ef	2.40 e	12.1 a
P-48	21.7 g	3.40 bc	.65 f	2.90 cde	11.7 bc
P-42	23.0 bcd	3.27 d	.73 def	4.52 a	11.2 d
Pima S-5	23.5 b	3.42 bc	.76 cde	2.74 de	11.8 ab
P-47	22.5 def	3.41 bc	.80 bcd	3.52 bcd	11.7 bc
P-44	22.3 ef	3.49 ab	.91 a	4.11 ab	11.3 cd
P-46	22.7 cdef	3.33 cd	.76 cde	2.86 cde	12.1 a
E-16	23.2 bc	3.50 ab	.92 a	3.00 cde	11.5 bcd
E-15	22.8 cde	3.57 a	.87 ab	2.78 de	11.5 bcd
P-49	22.2 f	3.45 abc	.80 bcd	3.70 abcd	11.4 cd
E-14	22.7 cdef	3.49 ab	.84 abc	3.76 abc	11.4 cd
P-50	22.8 cde	3.56 a	.77 cde	3.02 cde	11.7 bc

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
P-43	121.7 ab	128.9 ab	1.051 abc	1.0 e	12.8 a
P-45	109.6 e	120.1 e	1.022 fg	1.5 de	11.2 d
P-34	123.3 a	130.0 a	1.038 cde	2.6 bcd	12.7 a
P-48	123.4 a	130.0 a	1.012 g	4.8 a	12.4 abc
P-42	114.4 d	123.6 d	1.020 fg	3.4 b	11.6 d
Pima S-5	119.2 abc	127.0 abc	1.031 ef	3.4 b	12.3 abc
P-47	118.3 bcd	126.4 bcd	1.047 cd	2.0 cde	12.4 abc
P-44	109.6 e	120.1 e	1.053 abc	2.9 bc	11.4 d
P-46	121.9 ab	126.6 bcd	1.021 fg	3.3 b	12.4 abc
E-16	115.4 cd	124.2 cd	1.050 abc	1.9 cde	12.1 c
E-15	114.7 d	124.2 cd	1.064 a	1.8 cde	12.2 bc
P-49	122.9 ab	129.7 ab	1.035 def	1.7 cde	12.7 a
E-14	121.5 ab	128.2 ab	1.048 bcd	1.2 e	12.7 a
P-50	119.4 abc	127.2 abc	1.062 ab	2.0 cde	12.6 ab

Table 160. Pima test: Combined yield, boll and yarn tenacity data for El Paso and Fabens, Tex., and Safford, Ariz. (Curtis and Layton farms), by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-34	1004 a	3.40 bcd	40.7 a	12.9 a	203 ab
P-47	988 ab	3.45 abc	37.6 d	12.2 def	206 a
P-45	986 ab	3.16 d	37.7 d	11.2 g	207 a
P-49	984 ab	3.71 a	37.6 d	12.5 bcd	187 ef
E-16	957 abc	3.64 ab	37.6 d	12.0 ef	199 bc
P-50	943 bcd	3.69 a	36.1 g	12.3 cde	192 de
P-44	940 bcd	3.24 cd	37.1 ef	11.5 g	195 cd
E-15	929 cd	3.66 ab	37.6 d	12.3 cdef	196 cd
E-14	916 cd	3.64 ab	36.8 f	12.7 ab	186 f
Pima S-5	915 cd	3.66 ab	39.2 c	11.9 f	194 cd
P-48	903 cd	3.43 abc	39.8 b	12.6 abc	203 ab
P-43	891 de	3.51 abc	37.4 de	12.7 ab	201 abc
P-46	850 ef	3.25 cd	36.1 g	12.2 cdef	201 abc
P-42	829 f	3.45 abc	39.3 c	11.5 g	199 bc

Table 161. Pima test: Combined fiber data for El Paso and Fabens, Tex., and Safford, Ariz. (Layton and Curtis farms), by cotton variety

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-34	1.38 f	0.68 abc	288 cde	7.4 abcd	4.75 ab
P-47	1.40 def	.70 ab	304 a	7.0 d	4.81 a
P-45	1.43 ab	.70 ab	300 ab	7.2 bcd	4.48 cd
P-49	1.42 bcde	.69 abc	274 gh	7.8 a	4.50 cd
E-16	1.42 bcde	.69 abc	292 bc	7.0 d	4.04 f
P-50	1.41 bcde	.70 ab	280 defg	7.7 ab	4.21 ef
P-44	1.40 def	.67 bc	267 h	7.0 d	4.30 de
E-15	1.40 cde	.68 abc	276 efgh	7.3 abcd	4.18 ef
E-14	1.42 bcd	.69 abc	275 fgh	7.3 abcd	4.52 cd
Pima S-5	1.39 ef	.68 abc	282 cdefg	7.5 abcd	4.34 cde
P-48	1.42 bcde	.71 a	289 bcd	7.0 d	4.18 ef
P-43	1.40 def	.69 abc	288 cde	7.5 abcd	4.56 bc
P-46	1.43 bc	.70 ab	287 cdef	7.1 cd	4.44 cd
P-42	1.46 a	.71 a	275 fgh	7.6 abc	4.02 f

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
P-34	1.37 ab	87.4 a	40.8 abc	62.6 b	13.2 a
P-47	1.38 ab	86.5 abc	41.0 abc	65.6 ab	12.3 b
P-45	1.36 abc	85.2 abc	42.9 a	65.8 ab	12.1 b
P-49	1.37 ab	84.6 bc	39.6 abcd	64.4 ab	12.5 ab
E-16	1.21 c	85.0 abc	41.6 ab	66.2 a	12.6 ab
P-50	1.38 ab	86.5 abc	41.9 ab	65.9 ab	12.2 b
P-44	1.40 ab	84.2 c	38.2 bcd	64.6 ab	12.5 ab
E-15	1.37 ab	85.2 abc	37.2 cd	64.2 ab	11.9 b
E-14	1.26 abc	84.5 c	42.0 ab	64.8 ab	12.6 ab
Pima S-5	1.32 abc	85.4 abc	36.2 d	65.5 ab	12.2 b
P-48	1.42 a	87.2 ab	37.9 bcd	66.9 a	12.0 b
P-43	1.32 abc	86.6 abc	36.5 d	65.2 ab	12.4 b
P-46	1.36 abc	85.6 abc	37.0 cd	66.3 a	12.6 ab
P-42	1.24 bc	85.4 abc	40.9 abc	66.3 a	12.6 ab

Table 162. Pima test: Combined seed data for El Paso and Fabens, Tex., and Safford, Ariz. (Curtis and Layton farms), by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-34	21.6 e	3.51 ab	0.71 ef	0.8 e	12.6 a
P-47	22.3 cd	3.38 cd	.79 cde	1.4 bcd	12.0 b
P-45	21.8 de	3.38 cd	.93 abc	1.8 abc	11.5 cd
P-49	22.0 cde	3.43 abcd	.89 abcd	1.7 abc	11.8 bc
E-16	23.1 a	3.54 a	1.02 a	1.9 bc	12.0 b
P-50	23.1 a	3.41 bcd	.85 bcd	2.2 a	11.9 b
P-44	21.8 cde	3.49 abc	.94 ab	2.2 a	11.3 de
E-15	23.1 a	3.47 abcd	.98 ab	1.4 bcd	11.9 b
E-14	23.0 ab	3.42 abcd	.96 ab	2.3 a	11.8 bc
Pima S-5	23.1 a	3.48 abc	.85 bcd	1.0 de	11.9 b
P-48	20.9 f	3.44 abcd	.66 f	1.3 bcde	11.9 b
P-43	23.5 a	3.41 bcd	.84 bcd	2.2 a	11.1 e
P-46	22.4 bc	3.34 d	.86 bcd	1.1 cde	11.9 b
P-42	22.2 cde	3.39 bcd	.76 def	1.9 ab	12.0 b

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
P-34	137.5 a	139.8 a	0.943 abcde	3.8 bcd	12.9 a
P-47	129.0 bc	134.0 bc	.945 abcd	2.6 bcd	12.2 de
P-45	123.2 de	129.9 de	.912 f	1.9 cd	11.2 f
P-49	136.2 a	138.7 a	.943 abcde	2.1 cd	12.5 bcd
E-16	126.8 cd	132.4 cd	.949 ab	2.3 bcd	12.1 de
P-50	130.0 bc	134.7 bc	.954 a	2.6 bcd	12.4 cde
P-44	119.7 e	127.4 e	.948 abc	4.2 bc	11.3 f
E-15	129.5 bc	134.3 bc	.955 a	1.8 cd	12.4 cde
E-14	133.4 ab	137.0 ab	.955 a	1.5 d	12.7 abc
Pima S-5	130.1 bc	134.7 bc	.925 bcdef	2.7 bcd	12.0 e
P-48	138.6 a	140.5 a	.917 ef	6.8 a	12.7 abc
P-43	136.4 a	139.0 a	.943 abcde	2.3 bcd	12.8 ab
P-46	134.2 ab	137.5 ab	.922 cdef	2.7 bcd	12.4 cde
P-42	126.0 cd	131.8 cd	.918 def	4.6 b	11.5 f

Table 163. Pima test: Yield, boll and yarn tenacity data for Wenden, Ariz.

Variety	Lint yield (lb/ acre)	Boll size (g/ boll)	Lint percent	Seed index	Yarn tenacity (mN/ tex)
E-16	1435 a	3.41	35.8	12.4	208
E-15	1365 ab	3.46	35.9	12.3	210
P-43	1304 abc	3.80	36.6	13.0	203
Pima S-5	1302 abc	3.59	37.8	12.3	200
P-48	1206 abcd	3.34	37.4	12.3	214
P-45	1194 abcd	2.87	35.1	11.4	218
P-49	1187 abcd	3.36	34.4	12.6	206
E-14	1162 bcd	3.22	34.6	12.7	198
P-46	1138 bcd	2.96	34.1	12.2	212
P-47	1087 cd	3.45	35.3	12.5	227
P-34	1042 cd	3.32	37.8	12.9	206
P-42	1011 d	3.39	37.6	11.9	206
P-44	999 d	2.92	35.0	11.8	206
P-50	988 d	3.18	33.2	12.8	213

Table 164. Pima test: Fiber data for Wenden, Ariz.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
E-16	1.44	0.69	290	6.2	4.00
E-15	1.43	.71	292	6.6	4.05
P-43	1.42	.70	286	7.0	4.40
Pima S-5	1.40	.68	288	7.5	4.30
P-48	1.42	.71	288	6.6	3.85
P-45	1.46	.72	295	6.4	4.35
P-49	1.42	.71	274	6.8	4.25
E-14	1.44	.70	290	6.8	4.25
P-46	1.42	.70	297	6.6	4.05
P-47	1.41	.70	304	6.8	4.60
P-34	1.40	.68	288	7.1	4.40
P-42	1.44	.72	298	7.6	4.35
P-44	1.42	.69	288	5.8	4.25
P-50	1.44	.70	282	7.2	4.10

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
E-16	1.44	86.5	37.5	67.2	12.8
E-15	1.44	87.0	37.5	69.0	11.9
P-43	1.40	85.0	44.0	63.0	12.1
Pima S-5	1.44	87.0	37.0	66.2	12.7
P-48	1.40	86.0	34.0	71.5	12.1
P-45	1.30	86.5	36.0	63.8	11.5
P-49	1.16	82.5	38.5	65.2	11.8
E-14	1.40	85.0	41.0	64.5	11.8
P-46	1.45	84.5	35.5	62.5	12.3
P-47	1.38	85.5	40.0	66.0	12.4
P-34	1.40	87.0	38.0	62.2	12.5
P-42	1.24	85.5	43.0	68.5	12.3
P-44	1.42	84.5	39.0	67.0	11.9
P-50	1.34	85.0	37.0	66.5	11.1

Table 165. Pima test: Seed data for Wenden, Ariz.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
E-16	23.8	3.44	1.12	2.64	11.5
E-15	23.0	3.55	.98	2.24	11.0
P-43	24.7	3.44	.86	2.69	11.0
Pima S-5	23.0	3.46	.82	2.98	11.0
P-48	20.9	3.44	.68	3.10	12.0
P-45	21.9	3.36	.93	3.90	11.0
P-49	22.2	3.36	.77	3.22	11.5
E-14	22.4	3.56	.93	3.96	11.0
P-46	22.4	3.34	.82	2.60	12.0
P-47	21.9	3.54	.85	3.02	12.0
P-34	21.7	3.53	.74	2.80	11.5
P-42	22.0	3.48	.76	4.46	11.0
P-44	21.4	3.58	.90	4.16	11.5
P-50	22.9	3.54	.81	2.83	11.5

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
E-16	117.6	126.0	1.037	0.0	12.2
E-15	118.8	126.8	1.040	.2	12.4
P-43	122.1	129.2	1.038	1.8	12.7
Pima S-5	119.6	127.4	1.013	5.0	12.2
P-48	123.8	130.4	.996	6.2	12.3
P-45	110.0	120.5	.994	2.8	10.9
P-49	124.3	130.7	1.003	1.5	12.5
E-14	118.9	126.9	1.029	1.5	12.2
P-46	123.7	124.2	.995	4.2	12.3
P-47	123.4	130.0	1.044	1.5	13.0
P-34	121.2	128.4	1.027	2.2	12.4
P-42	111.0	121.2	1.005	4.5	11.1
P-44	106.4	117.8	1.056	3.5	11.2
P-50	118.7	126.8	1.040	1.0	12.3

Table 166. Pima test: Yield, boll and yarn tenacity data for Phoenix, Ariz.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-43	1345 a	3.63	34.4	12.6	206
P-42	1314 ab	2.99	35.7	11.3	208
P-48	1313 ab	3.39	36.4	12.0	217
P-34	1240 bc	2.83	36.3	12.6	214
P-45	1190 c	2.61	33.9	10.9	223
Pima S-5	1166 c	3.56	34.9	12.3	198
P-46	1058 d	2.91	33.0	12.3	212
P-47	984 de	3.49	33.1	12.6	220
P-44	920 ef	2.85	32.4	11.5	200
E-15	865 f	2.96	34.4	11.5	202
P-49	858 f	3.18	32.4	13.0	194
E-16	835 f	2.83	33.6	11.6	208
E-14	733 g	2.73	31.4	12.9	186
P-50	693 g	3.12	31.2	12.7	206

Table 167. Pima test: Fiber data for Phoenix, Ariz.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-43	1.38	0.66	262	7.0	4.55
P-42	1.42	.69	259	7.0	4.45
P-48	1.40	.70	306	7.4	4.30
P-34	1.35	.65	264	6.6	4.50
P-45	1.40	.70	302	7.0	4.70
Pima S-5	1.38	.68	264	7.5	4.35
P-46	1.42	.70	296	7.0	4.45
P-47	1.40	.71	290	7.5	4.75
P-44	1.37	.66	265	7.2	4.25
E-15	1.37	.68	272	7.0	4.00
P-49	1.40	.68	276	7.4	4.50
E-16	1.38	.67	295	7.2	3.80
E-14	1.39	.68	262	7.1	4.25
P-50	1.40	.70	268	7.5	4.50

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
P-43	1.42	88.5	39.5	67.8	12.0
P-42	1.07	85.5	40.5	67.2	12.1
P-48	1.44	86.0	37.5	67.5	11.3
P-34	1.46	87.5	39.5	62.0	13.3
P-45	1.47	86.5	38.5	62.0	9.6
Pima S-5	1.32	85.0	40.0	67.2	11.9
P-46	1.33	89.5	32.5	68.2	11.3
P-47	1.40	89.0	41.5	66.2	12.1
P-44	1.40	86.0	36.0	68.0	11.9
E-15	1.39	84.5	37.0	65.2	12.6
P-49	1.46	85.5	38.5	65.5	12.1
E-16	1.38	86.5	38.5	66.5	12.3
E-14	1.36	85.5	39.5	65.8	12.7
P-50	1.41	86.0	38.0	68.0	12.8

Table 168. Pima test: Seed data for Phoenix, Ariz.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-43	25.7	3.36	0.41	3.6	11.0
P-42	24.4	3.21	.45	7.7	11.0
P-48	23.2	3.42	.33	4.3	12.0
P-34	23.4	3.54	.41	4.5	12.0
P-45	22.8	3.42	.50	5.4	11.0
Pima S-5	23.6	3.74	.46	3.9	11.5
P-46	22.3	3.63	.35	3.6	12.0
P-47	22.5	3.74	.42	5.1	11.0
P-44	22.0	3.81	.47	5.5	11.0
E-15	22.0	4.02	.40	4.8	10.5
P-49	21.4	3.83	.37	5.7	10.5
E-16	22.0	4.04	.43	4.5	10.5
E-14	21.5	3.90	.33	5.8	10.5
P-50	22.2	3.88	.35	4.2	11.0

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
P-43	119.8	127.5	1.054	0.3	12.6
P-42	105.0	116.8	1.018	3.8	10.7
P-48	121.3	128.6	1.004	3.8	12.2
P-34	119.3	127.2	1.037	2.3	12.4
P-45	105.0	116.8	1.014	1.3	10.7
Pima S-5	118.4	126.6	1.027	3.3	12.2
P-46	123.0	121.5	1.013	3.3	12.5
P-47	113.7	123.2	1.061	2.0	12.1
P-44	105.3	117.1	1.050	5.3	11.1
E-15	119.7	127.2	1.061	3.5	12.7
P-49	121.4	128.7	1.049	3.3	12.5
E-16	106.3	117.8	1.061	3.8	11.3
E-14	119.5	127.3	1.048	1.2	12.5
P-50	116.5	125.2	1.074	1.8	12.5

Table 169. Pima test: Yield, boll and yarn tenacity data for Safford, Ariz. (Curtis farm)

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-47	1323 a	3.23	37.7	11.2	210
P-44	1281 ab	3.11	37.4	10.9	196
P-34	1273 ab	3.16	40.7	12.3	208
P-45	1267 ab	2.99	38.1	10.4	205
P-50	1265 ab	3.52	36.4	11.7	194
P-48	1218 abc	3.41	40.0	11.9	199
P-49	1211 abc	3.49	38.2	11.8	189
E-14	1208 abc	3.46	37.0	11.9	186
P-42	1182 bc	3.23	39.9	11.0	206
Pima S-5	1181 bc	3.58	39.5	11.3	200
E-15	1169 bc	3.53	38.5	11.2	193
E-16	1120 c	3.26	38.1	11.0	190
P-46	1119 c	2.98	36.3	11.4	199
P-43	1117 c	3.41	38.0	12.2	208

Table 170. Pima test: Fiber data for Safford, Ariz. (Curtis farm)

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-47	1.36	0.66	294	6.6	4.50
P-44	1.37	.65	266	6.6	4.20
P-34	1.37	.68	286	7.2	4.75
P-45	1.40	.67	294	6.7	4.35
P-50	1.42	.69	270	7.6	4.30
P-48	1.38	.70	291	6.5	4.05
P-49	1.37	.66	273	7.9	4.55
E-14	1.39	.67	274	7.0	4.40
P-42	1.43	.69	274	7.3	4.00
Pima S-5	1.37	.64	267	7.0	4.45
E-15	1.34	.64	254	7.6	4.00
E-16	1.38	.66	290	6.5	3.90
P-46	1.38	.66	284	7.0	4.45
P-43	1.38	.68	288	7.4	4.55

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
P-47	1.35	83.5	44.0	65.8	12.6
P-44	1.35	82.5	35.0	63.5	12.6
P-34	1.44	88.0	40.0	63.2	13.6
P-45	1.34	84.5	40.5	65.5	12.0
P-50	1.44	85.5	40.0	67.2	13.0
P-48	1.44	86.5	37.5	67.2	12.5
P-49	1.40	87.0	43.5	66.8	12.3
E-14	1.30	83.5	41.5	64.8	13.0
P-42	1.44	86.0	41.0	65.2	12.5
Pima S-5	1.41	83.5	32.0	66.2	11.7
E-15	1.38	84.0	36.0	67.2	13.0
E-16	1.29	82.5	42.5	66.8	12.8
P-46	1.32	85.5	39.0	65.8	12.6
P-43	1.33	86.5	33.0	63.2	12.6

Table 171. Pima test: Seed data for Safford, Ariz. (Curtis farm)

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-47	22.9	3.19	0.98	2.0	12.0
P-44	22.6	3.33	1.04	2.2	11.0
P-34	21.2	3.36	.69	1.3	12.0
P-45	21.9	3.21	.93	2.1	11.0
P-50	23.0	3.36	.85	1.6	11.5
P-48	21.4	3.38	.70	.4	11.5
P-49	21.5	3.49	.87	1.4	11.5
E-14	22.9	3.39	.94	1.4	11.5
P-42	23.1	3.23	.75	1.1	12.0
Pima S-5	23.7	3.50	.80	1.5	11.5
E-15	22.9	3.49	1.03	1.6	11.5
E-16	22.4	3.63	1.00	1.7	12.0
P-46	22.7	3.24	.85	.9	11.5
P-43	23.9	3.42	.80	1.7	11.0

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
P-47	119.0	127.0	0.963	2.3	11.5
P-44	107.8	118.9	1.001	3.0	10.8
P-34	131.3	135.6	.966	3.5	12.5
P-45	112.3	122.2	.935	1.3	10.5
P-50	126.1	132.0	.953	3.0	12.0
P-48	128.9	133.9	.948	7.8	12.2
P-49	120.8	128.2	.972	3.3	11.7
E-14	128.4	133.6	.954	.5	12.2
P-42	117.0	125.5	.947	3.0	11.1
Pima S-5	121.0	128.4	.969	2.3	11.7
E-15	121.7	128.9	.953	2.8	11.6
E-16	117.6	126.0	.950	2.8	10.9
P-46	122.1	129.2	.960	2.0	11.7
P-43	125.3	131.4	.984	2.0	12.3

Table 172. Pima test: Yield, boll and yarn tenacity data for Salome, Ariz.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-45	1253 a	2.93	37.0	10.7	217
P-34	1175 ab	3.23	39.7	12.5	208
Pima S-5	1167 ab	3.52	38.3	11.5	206
E-16	1139 abc	3.31	36.9	11.3	208
P-44	1134 abc	3.14	36.5	11.0	204
P-47	1121 abc	3.12	36.1	11.9	220
P-42	1087 abc	3.40	38.1	11.5	206
P-48	1066 bc	3.24	38.5	12.1	212
E-15	1045 bc	3.35	36.9	11.6	203
P-49	1039 bc	3.20	36.1	12.0	200
P-46	1037 bc	2.81	35.4	11.8	217
E-14	1033 bc	3.27	35.9	12.2	196
P-50	1011 bc	3.12	34.5	12.2	212
P-43	982 c	3.34	37.0	12.4	208

Table 173. Pima test: Fiber data for Salome, Ariz.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-45	1.44	0.70	318	6.2	4.30
P-34	1.42	.73	298	6.8	4.70
Pima S-5	1.40	.70	292	6.8	4.40
E-16	1.42	.68	296	6.3	4.00
P-44	1.38	.69	280	6.8	4.25
P-47	1.41	.70	319	6.6	4.65
P-42	1.44	.71	294	6.7	4.40
P-48	1.46	.74	300	6.6	4.05
E-15	1.38	.68	292	6.5	4.20
P-49	1.44	.70	280	6.5	4.50
P-46	1.43	.70	302	6.5	4.35
E-14	1.44	.67	282	6.7	4.40
P-50	1.45	.72	294	6.7	4.20
P-43	1.43	.72	298	7.0	4.45

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
P-45	1.33	84.0	39.5	65.2	12.5
P-34	1.38	86.0	43.5	64.5	12.9
Pima S-5	1.50	83.5	42.0	65.5	12.9
E-16	1.46	86.5	39.5	67.2	12.9
P-44	1.44	84.0	39.5	68.0	12.3
P-47	1.36	87.5	37.5	68.2	12.6
P-42	1.48	86.0	37.0	61.2	10.9
P-48	1.43	85.0	37.5	66.5	12.3
E-15	1.43	85.5	41.5	64.2	11.3
P-49	1.42	85.0	43.0	66.2	13.0
P-46	1.35	85.5	40.0	68.8	12.8
E-14	1.25	84.0	40.5	65.8	12.3
P-50	1.38	85.5	42.0	67.2	12.0
P-43	1.30	86.0	40.5	63.8	12.8

Table 174. Pima test: Seed data for Salome, Ariz.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-45	23.2	3.04	0.89	4.1	11.5
P-34	22.7	3.45	.71	1.7	12.0
Pima S-5	23.4	3.16	.69	3.7	12.0
E-16	23.8	3.20	.90	3.8	11.5
P-44	22.9	3.27	.99	4.3	11.0
P-47	23.1	3.12	.74	4.4	11.0
P-42	23.9	3.11	.65	3.5	11.0
P-48	21.0	3.32	.65	3.1	11.5
E-15	22.8	3.45	.88	3.2	12.0
P-49	22.0	3.45	.74	4.6	11.0
P-46	23.4	3.05	.87	3.7	12.0
E-14	23.1	3.30	.93	4.5	11.5
P-50	22.9	3.35	.78	3.1	11.5
P-43	23.8	3.45	.73	4.3	11.0

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
P-45	102.9	115.3	1.027	0.8	10.6
P-34	122.1	129.2	1.043	3.8	12.7
Pima S-5	108.9	119.7	1.040	2.3	11.3
E-16	104.1	116.1	1.047	1.5	10.9
P-44	100.9	113.7	1.072	1.3	10.8
P-47	109.5	120.1	1.047	2.0	11.5
P-42	110.9	121.1	1.011	1.3	11.2
P-48	117.4	125.9	1.012	4.3	11.9
E-15	105.7	117.3	1.068	2.3	11.3
P-49	114.2	123.6	1.021	1.3	11.7
P-46	117.2	125.7	1.029	2.5	12.1
E-14	118.3	123.6	1.028	1.0	12.2
P-50	113.5	123.0	1.059	1.8	12.1
P-43	120.0	127.7	1.057	.3	12.4

Table 175. Pima test: Yield, boll and yarn tenacity data for Marana, Ariz. (Station)

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-34	1218 a	3.65	39.6	12.4	213
P-43	1181 a	3.63	36.7	12.6	205
P-45	1157 ab	3.17	36.9	10.9	216
P-42	1151 ab	3.70	37.7	11.5	204
P-44	1144 ab	3.21	36.6	11.2	202
P-48	1120 ab	3.88	38.3	12.7	216
P-47	1120 ab	3.87	36.4	12.2	212
E-16	1040 bc	3.45	37.0	11.8	216
Pima S-5	1039 bc	4.21	38.5	12.0	200
E-15	1025 bc	3.48	37.4	11.7	216
P-46	980 c	3.33	35.3	12.1	208
P-49	944 cd	3.80	36.3	12.6	202
E-14	849 de	3.61	36.2	12.5	198
P-50	785 e	3.75	35.6	12.5	204

Table 176. Pima test: Fiber data for Marana, Ariz.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-34	1.41	0.72	292	6.2	4.65
P-43	1.44	.74	310	6.6	4.45
P-45	1.43	.72	295	7.3	4.70
P-42	1.46	.73	279	6.9	4.35
P-44	1.40	.68	255	6.4	4.45
P-48	1.42	.72	296	6.8	4.25
P-47	1.46	.74	308	6.4	4.90
E-16	1.42	.72	312	6.6	4.15
Pima S-5	1.41	.70	291	6.6	4.50
E-15	1.42	.71	296	6.6	4.30
P-46	1.45	.71	282	6.6	4.40
P-49	1.42	.72	292	7.4	4.80
E-14	1.44	.72	288	7.2	4.45
P- 50	1.46	.75	300	7.2	4.20

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
P-34	1.46	88.5	39.0	61.5	13.4
P-43	1.24	86.5	35.5	65.5	12.0
P-45	1.44	86.5	36.0	66.8	11.4
P-42	1.24	86.0	32.0	63.0	12.8
P-44	1.38	84.5	41.5	64.2	11.9
P-48	1.26	90.5	34.0	61.0	11.4
P-47	1.44	88.0	38.5	57.2	11.3
E-16	1.32	84.0	39.5	65.0	12.3
Pima S-5	1.42	87.0	35.5	66.0	11.6
E-15	1.24	83.0	35.0	60.0	11.9
P-46	1.40	84.5	34.5	64.0	11.9
P-49	1.46	86.0	40.5	60.2	12.6
E-14	1.18	85.0	40.0	61.8	12.7
P-50	1.14	84.5	34.5	64.5	11.7

Table 177. Pima test: Seed data for Marana, Ariz.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-34	23.6	3.26	0.76	1.3	12.5
P-43	25.5	3.13	.97	4.5	11.0
P-45	24.0	3.04	1.00	3.2	11.5
P-42	23.7	3.07	.86	3.5	11.5
P-44	23.8	3.16	1.03	3.4	12.0
P-48	22.7	3.13	.87	2.7	11.5
P-47	23.5	3.12	1.00	3.1	12.0
E-16	23.6	3.39	1.03	2.8	12.0
Pima S-5	23.9	3.22	.86	2.1	12.0
E-15	23.6	3.27	1.04	2.7	12.0
P-46	23.6	3.12	.87	2.9	12.0
P-49	23.2	3.21	1.04	2.9	12.0
E-14	23.7	3.28	1.08	3.3	12.0
P-50	24.1	3.22	.97	2.6	12.0

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
P-34	126.0	131.9	1.035	1.8	12.5
P-43	111.0	121.2	1.030	1.3	11.4
P-45	112.0	121.8	1.037	.5	11.6
P-42	118.6	126.7	1.020	2.5	11.6
P-44	108.8	119.6	1.030	1.0	11.2
P-48	122.0	129.1	1.026	2.3	12.5
P-47	114.5	123.8	1.047	1.8	12.0
E-16	110.8	121.1	1.052	1.0	11.6
Pima S-5	116.3	125.1	1.029	2.3	12.0
E-15	106.0	120.1	1.089	1.8	11.5
P-46	120.1	127.8	1.017	3.3	12.2
P-49	118.3	126.4	1.049	1.0	12.4
E-14	118.6	126.7	1.045	1.3	12.4
P-50	123.4	130.1	1.052	2.3	12.4

Table 178. Pima test: Yield, boll and yarn tenacity data for Fabens, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-49	1188 a	3.98	38.1	12.4	188
P-34	1179 a	3.48	41.1	13.0	201
E-16	1157 ab	4.27	37.8	12.5	196
E-14	1118 abc	3.56	37.5	12.5	180
P-47	1078 abcd	3.36	37.4	12.6	203
Pima S-5	1067 abcde	3.58	39.7	11.7	192
P-45	1061 abcde	3.10	38.2	11.1	201
E-15	1046 bcde	3.55	37.1	12.8	192
P-46	1030 bcde	3.66	36.4	12.5	196
P-44	999 cde	3.40	37.5	11.7	190
P-43	987 cde	3.41	37.3	12.8	193
P-48	962 de	3.24	39.6	12.6	202
P-50	942 de	3.99	36.1	12.3	189
P-42	933 e	3.73	39.7	11.6	198

Table 179. Pima test: Fiber data for Fabens, Tex.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-49	1.40	0.70	264	8.0	4.55
P-34	1.36	.69	289	7.6	4.70
E-16	1.41	.67	288	7.5	4.15
E-14	1.42	.68	258	7.4	4.70
P-47	1.40	.72	294	7.8	5.10
Pima S-5	1.38	.66	284	8.2	4.10
P-45	1.42	.68	292	7.8	4.55
E-15	1.42	.66	276	7.8	4.30
P-46	1.42	.72	280	7.8	4.35
P-44	1.40	.68	262	7.8	4.30
P-43	1.38	.68	286	7.8	4.65
P-48	1.40	.72	289	7.0	4.20
P-50	1.40	.69	265	7.8	4.00
P-42	1.45	.69	268	7.9	3.65

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
P-49	1.49	82.0	35.0	63.5	12.6
P-34	1.41	88.5	37.5	64.0	13.3
E-16	1.30	86.0	41.5	64.8	12.3
E-14	1.14	84.5	42.0	65.8	12.1
P-47	1.45	87.5	41.0	64.8	12.1
Pima S-5	1.20	89.5	33.5	67.0	12.6
P-45	1.37	85.0	41.0	64.5	12.0
E-15	1.34	84.5	36.5	63.2	10.9
P-46	1.42	88.0	36.5	65.2	12.7
P-44	1.43	85.5	40.5	60.0	12.9
P-43	1.42	88.0	37.5	69.2	12.0
P-48	1.42	87.5	39.5	66.2	12.0
P-50	1.39	89.0	41.5	63.0	11.4
P-42	1.20	85.5	37.5	67.2	12.9

Table 180. Pima test: Seed data for Fabens, Tex.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-49	22.2	3.52	0.91	1.7	11.5
P-34	21.7	3.80	.67	.5	12.5
E-16	24.0	3.57	1.09	2.2	12.0
E-14	22.8	3.52	1.01	3.2	12.0
P-47	21.9	3.58	.90	1.0	12.0
Pima S-5	22.6	3.59	.82	1.1	12.0
P-45	20.2	3.76	.83	1.3	11.5
E-15	23.4	3.60	1.10	1.6	12.0
P-46	22.6	3.43	.86	1.3	12.0
P-44	20.9	3.69	.90	2.1	11.5
P-43	22.8	3.50	.78	3.0	11.5
P-48	20.7	3.72	.70	1.8	12.0
P-50	23.0	3.57	.89	3.5	12.0
P-42	21.8	3.61	.73	2.4	12.0

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
P-49	129.3	134.2	0.946	1.8	12.2
P-34	137.3	139.6	.931	3.0	12.8
E-16	127.8	133.1	.953	.5	12.7
E-14	127.3	132.8	.964	1.5	12.3
P-47	130.9	135.3	.937	2.3	12.3
Pima S-5	129.5	134.3	.898	1.8	11.6
P-45	119.9	127.6	.920	2.0	11.0
E-15	130.5	135.0	.965	1.0	12.6
P-46	136.5	139.1	.913	2.8	12.5
P-44	122.2	129.2	.927	4.5	11.3
P-43	136.2	138.9	.939	3.8	12.8
P-48	143.3	143.7	.899	8.8	12.9
P-50	128.6	133.6	.961	2.8	12.1
P-42	126.2	132.1	.907	2.5	11.4

Table 181. Pima test: Yield, boll and yarn tenacity data for Marana, Ariz. (Clark farm)

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-45	1068 a	3.46	34.7	12.1	212
P-34	1065 a	4.03	37.9	14.1	212
P-48	1045 ab	3.97	36.3	14.4	213
P-42	1037 ab	4.19	35.8	13.8	198
P-43	949 abc	4.22	34.4	15.2	209
P-44	948 abc	3.71	34.2	12.8	203
P-47	914 abc	4.15	34.0	14.1	210
Pima S-5	902 bc	4.15	35.5	14.3	198
P-46	810 cd	3.74	33.2	14.0	207
E-15	710 d	3.97	34.7	13.4	199
E-16	669 de	3.90	34.4	13.5	202
P-50	564 e	4.08	31.8	14.6	194
P-49	564 e	4.24	33.1	14.9	191
E-14	530 e	3.95	33.5	14.6	190

Table 182. Pima test: Fiber data for Marana, Ariz. (Clark farm)

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-45	1.48	0.73	311	6.8	4.50
P-34	1.43	.74	298	7.0	4.85
P-48	1.48	.76	297	7.2	4.35
P-42	1.51	.77	265	7.7	4.60
P-43	1.44	.72	296	8.1	4.85
P-44	1.44	.72	264	6.8	4.60
P-47	1.46	.74	293	7.0	4.80
Pima S-5	1.46	.74	268	7.8	4.50
P-46	1.48	.76	283	6.8	3.95
E-15	1.44	.70	266	6.7	4.30
E-16	1.47	.72	276	6.8	4.40
P-50	1.48	.70	272	7.3	4.60
P-49	1.43	.70	278	7.0	4.80
E-14	1.46	.70	264	7.2	4.85

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	Rd	Hunter's b value
P-45	1.42	86.5	37.5	61.5	11.5
P-34	1.28	86.0	40.0	64.0	12.8
P-48	1.34	86.0	36.5	68.8	11.4
P-42	.90	83.5	37.0	64.8	11.8
P-43	1.18	86.5	36.5	63.5	12.0
P-44	1.30	86.0	37.5	65.2	11.5
P-47	1.26	87.0	41.0	63.0	12.0
Pima S-5	1.04	82.5	37.5	67.0	12.0
P-46	1.22	75.0	42.0	64.8	11.7
E-15	1.49	86.5	34.5	61.5	12.3
E-16	1.28	84.0	38.0	63.5	11.8
P-50	1.34	82.5	36.0	62.0	12.8
P-49	1.49	85.0	38.5	63.8	12.9
E-14	.86	87.5	37.5	60.5	11.7

Table 183. Pima test: Seed data for Marana, Ariz. (Clark farm)

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-45	23.4	3.40	1.06	1.4	12.0
P-34	23.3	3.05	.84	1.0	12.5
P-48	22.1	3.70	.70	.7	11.5
P-42	24.0	3.38	.97	2.3	12.0
P-43	24.5	3.63	1.05	2.5	12.0
P-44	22.9	3.62	1.18	1.7	11.5
P-47	23.2	3.55	1.05	1.1	12.0
Pima S-5	24.6	3.49	.95	1.6	12.5
P-46	23.9	3.54	.94	1.0	12.5
E-15	23.6	3.70	1.05	1.3	12.0
E-16	23.9	3.64	1.10	1.0	12.0
P-50	23.4	3.76	.92	1.5	12.0
P-49	22.6	3.64	.99	1.0	12.0
E-14	23.4	3.69	.99	1.3	12.0

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
P-45	120.9	128.3	1.029	1.3	12.4
P-34	132.9	136.7	1.047	3.3	13.9
P-48	139.2	141.0	1.031	3.0	14.1
P-42	129.6	134.4	1.037	2.8	13.4
P-43	139.0	140.8	1.061	1.5	14.7
P-44	126.7	132.4	1.061	2.3	12.9
P-47	137.4	139.7	1.040	2.0	14.3
Pima S-5	134.5	137.8	1.041	2.3	14.0
P-46	132.2	136.2	1.054	2.5	13.9
E-15	124.2	130.6	1.072	1.5	13.3
E-16	126.0	131.9	1.066	.8	13.4
P-50	131.2	135.5	1.081	1.3	14.2
P-49	142.0	142.9	1.029	1.3	14.6
E-14	134.4	137.7	1.070	.8	14.4

Table 184. Pima test: Yield, boll and yarn tenacity data for Safford, Ariz. (Layton farm)

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-45	987 a	3.29	37.5	11.3	212
P-47	838 b	3.68	37.7	12.5	214
P-50	829 bc	3.56	36.0	12.5	196
E-16	827 bcd	3.50	37.5	12.1	205
E-15	813 bcd	3.78	37.8	12.2	204
P-44	812 bcd	3.11	36.7	11.8	200
P-34	804 bcd	3.42	40.4	13.0	206
P-49	786 bcd	3.53	36.6	12.9	190
P-43	767 bcd	3.67	37.0	13.1	206
E-14	737 cde	3.78	36.1	13.0	192
Pima S-5	732 de	3.72	38.6	12.2	196
P-48	732 de	3.42	39.5	12.8	210
P-46	673 e	3.23	35.9	12.4	201
P-42	658 e	3.35	39.0	11.4	201

Table 185. Pima test: Fiber data for Safford, Ariz. (Layton farm)

Location	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-45	1.45	0.72	307	6.7	4.50
P-47	1.42	.71	309	6.3	4.80
P-50	1.42	.70	293	7.4	4.20
E-16	1.44	.72	286	7.0	4.05
E-15	1.40	.70	292	6.8	4.10
P-44	1.42	.68	280	6.7	4.40
P-34	1.40	.70	292	7.0	4.85
P-49	1.44	.70	284	7.4	4.40
P-43	1.40	.71	294	7.2	4.55
E-14	1.44	.69	290	7.2	4.50
Pima S-5	1.42	.70	286	7.6	4.45
P-48	1.44	.72	292	7.2	4.30
P-46	1.47	.70	293	6.4	4.40
P-42	1.44	.70	274	7.0	4.30

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
P-45	1.35	85.5	44.5	65.2	12.3
P-47	1.36	87.5	43.0	67.2	12.5
P-50	1.36	85.5	43.5	67.5	12.3
E-16	1.05	85.0	44.0	67.5	12.8
E-15	1.35	88.0	38.0	62.8	11.1
P-44	1.42	84.5	42.0	68.0	12.6
P-34	1.26	87.0	42.5	51.8	13.5
P-49	1.24	87.0	39.0	63.5	12.8
P-43	1.26	87.5	40.5	65.0	12.5
E-14	1.40	84.0	41.5	64.8	12.4
Pima S-5	1.26	85.0	42.5	67.0	12.2
P-48	1.36	87.5	40.0	68.2	12.1
P-46	1.32	83.5	37.5	66.5	12.5
P-42	1.40	84.5	41.0	64.2	13.2

Table 186. Pima test: Seed data for Safford, Ariz. (Layton farm)

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-45	23.8	3.11	0.90	1.9	11.5
P-47	22.6	3.16	.74	1.2	12.0
P-50	23.2	3.20	.67	2.7	12.0
E-16	23.3	3.33	.95	2.1	12.0
E-15	22.9	3.42	.83	1.5	12.0
P-44	22.2	3.21	.92	2.3	11.0
P-34	22.3	3.42	.76	.5	13.0
P-49	22.0	3.33	.82	2.5	12.0
P-43	24.2	3.22	.90	2.3	11.0
E-14	23.3	3.36	.84	2.9	11.5
Pima S-5	23.5	3.32	.97	.7	12.0
P-48	21.1	3.41	.51	1.4	12.0
P-46	23.2	3.29	.75	.9	12.0
P-42	22.3	3.27	.78	1.9	12.0

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
P-45	128.7	133.8	0.883	1.3	11.4
P-47	132.5	136.4	.941	2.5	12.5
P-50	129.2	134.2	.962	3.0	12.4
E-16	129.8	134.6	.943	2.0	12.2
E-15	130.0	134.7	.946	2.0	12.3
P-44	124.0	130.4	.936	4.5	11.6
P-34	137.1	139.5	.944	6.8	12.9
P-49	153.1	150.1	.931	1.3	12.9
P-43	144.0	144.2	.913	2.3	12.9
E-14	135.5	138.4	.961	1.0	13.0
Pima S-5	132.4	136.3	.930	3.0	12.3
P-48	137.5	139.8	.920	6.3	12.7
P-46	136.5	139.2	.915	4.3	12.5
P-42	122.6	129.5	.928	5.8	11.4

Table 187. Pima test: Yield, boll and yarn tenacity data for Coolidge, Ariz.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-34	973 a	2.97	38.0	12.4	212
P-43	938 ab	3.30	33.0	13.1	207
P-45	886 ab	2.87	35.4	11.0	216
P-48	880 ab	3.01	37.5	12.1	221
P-46	855 ab	2.86	34.1	11.9	216
P-44	844 ab	2.99	33.5	11.7	200
P-47	843 ab	3.04	34.7	12.3	210
Pima S-5	812 ab	3.28	36.8	12.3	208
P-42	807 ab	2.99	36.4	11.6	204
E-15	798 ab	3.08	35.0	11.9	204
E-16	766 abc	3.10	35.0	12.0	203
P-49	689 abc	3.16	34.0	12.4	197
E-14	666 bc	3.04	33.5	12.7	198
P-50	524 c	2.87	32.8	12.4	206

Table 188. Pima test: Fiber data for Coolidge, Ariz.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-34	1.40	0.70	324	7.3	4.20
P-43	1.43	.70	300	7.2	4.25
P-45	1.44	.70	312	6.8	4.40
P-48	1.42	.70	286	7.5	3.80
P-46	1.46	.72	305	7.3	3.85
P-44	1.42	.68	292	7.0	4.05
P-47	1.44	.72	315	7.0	4.05
Pima S-5	1.42	.68	292	8.0	4.35
P-42	1.44	.70	276	7.6	4.20
E-15	1.44	.69	282	7.0	3.90
E-16	1.44	.69	294	6.4	3.95
P-49	1.43	.70	296	7.8	4.25
E-14	1.42	.65	272	7.6	4.30
P-50	1.42	.68	298	7.7	4.00

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	Rd	Hunter's b value
P-34	1.34	86.0	41.5	64.8	12.6
P-43	1.37	87.5	39.5	66.2	11.9
P-45	1.20	84.0	39.0	65.5	11.5
P-48	1.44	84.0	36.5	65.5	12.2
P-46	1.36	85.0	44.0	66.2	12.3
P-44	1.18	83.5	39.5	66.0	12.8
P-47	1.34	84.5	47.0	66.2	11.5
Pima S-5	1.43	86.0	43.0	67.2	11.4
P-42	1.34	82.5	41.5	65.0	12.8
E-15	1.34	86.5	40.0	63.8	13.0
E-16	1.38	86.5	38.5	64.0	12.4
P-49	1.34	85.5	38.0	60.8	10.5
E-14	1.42	83.0	43.5	63.5	12.5
P-50	1.34	84.0	44.0	63.8	12.3

Table 189. Pima test: Seed data for Coolidge, Ariz.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-34	21.1	3.38	0.76	3.1	12.0
P-43	24.0	3.40	.85	4.3	11.0
P-45	22.2	3.34	.94	3.1	11.0
P-48	20.5	3.45	.70	3.5	11.5
P-46	20.9	3.34	.72	3.3	12.0
P-44	21.1	3.50	.91	5.6	11.0
P-47	20.9	3.42	.76	4.5	12.0
Pima S-5	22.5	3.47	.79	2.3	12.0
P-42	20.4	3.36	.68	5.7	11.0
E-15	22.0	3.45	.90	2.4	11.5
E-16	22.3	3.32	.94	3.3	11.5
P-49	22.1	3.33	.87	4.5	11.5
E-14	22.5	3.44	.76	3.8	11.5
P-50	21.2	3.62	.79	3.8	12.0

	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
P-34	118.5	126.6	1.039	2.3	12.3
P-43	118.5	126.6	1.069	1.3	12.7
P-45	106.8	118.1	1.032	2.5	11.0
P-48	116.7	125.4	1.008	9.5	11.8
P-46	115.3	124.4	1.019	4.3	11.8
P-44	109.6	120.2	1.048	4.0	11.5
P-47	111.5	121.6	1.044	3.0	11.6
Pima S-5	117.6	126.0	1.034	5.8	12.2
P-42	111.6	121.7	1.028	5.8	11.5
E-15	113.8	123.2	1.054	1.3	11.8
E-16	127.4	132.6	1.039	4.5	13.3
P-49	118.2	126.4	1.043	2.0	12.3
E-14	118.4	126.5	1.058	2.0	12.5
P-50	112.9	122.6	1.059	3.3	12.0

Table 190. Pima test: Yield, boll and yarn tenacity data for El Paso, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-49	752 a	3.82	37.3	12.7	180
P-34	750 a	3.53	40.6	13.2	198
P-50	736 a	3.70	35.7	12.6	190
E-16	723 ab	3.54	37.0	12.5	206
P-47	713 ab	3.51	37.5	12.5	199
P-48	700 ab	3.65	39.9	13.0	204
P-43	691 abc	3.53	37.3	12.8	197
E-15	690 abc	3.76	37.0	12.8	195
Pima S-5	681 abc	3.75	39.0	12.4	190
P-44	671 abc	3.35	36.8	11.7	192
P-45	628 bcd	3.26	36.9	12.0	209
E-14	600 dc	3.75	36.5	13.2	186
P-46	580 d	3.12	35.9	12.6	208
P-42	543 d	3.47	38.4	12.1	192

Table 191. Pima test: Fiber data for El Paso, Tex.

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-49	1.46	0.72	274	7.8	4.50
P-34	1.37	.66	284	8.0	4.70
P-50	1.42	.70	291	8.0	4.35
E-16	1.44	.70	305	6.9	4.05
P-47	1.40	.70	317	7.2	4.85
P-48	1.44	.69	282	7.4	4.15
P-43	1.44	.70	282	7.6	4.50
E-15	1.44	.70	281	7.0	4.30
Pima S-5	1.41	.70	290	7.2	4.35
P-44	1.40	.67	261	7.2	4.30
P-45	1.46	.74	306	7.7	4.50
E-14	1.45	.70	278	7.8	4.50
P-46	1.43	.72	288	6.9	4.55
P-42	1.50	.74	284	8.2	4.15

	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's b value
P-49	1.35	82.5	41.0	63.8	12.3
P-34	1.37	86.0	43.0	61.5	12.3
P-50	1.34	86.0	42.5	65.8	12.3
E-16	1.18	86.5	38.5	65.8	12.5
P-47	1.35	87.5	36.0	64.5	12.1
P-48	1.44	87.5	34.5	66.0	11.6
P-43	1.26	84.5	35.0	63.5	12.4
E-15	1.42	84.5	38.5	63.5	12.6
Pima S-5	1.40	83.5	37.0	61.8	12.2
P-44	1.39	84.5	35.5	66.8	12.0
P-45	1.38	86.0	45.5	68.0	12.1
E-14	1.19	86.0	43.0	64.0	12.7
P-46	1.38	85.5	35.0	67.8	12.5
P-42	.92	85.5	44.0	68.5	11.8

Table 192. Pima test: Seed data for El Paso, Tex.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-49	22.3	3.38	0.98	1.2	12.0
P-34	21.5	3.47	.73	.8	13.0
P-50	23.2	3.50	.98	1.1	12.0
E-16	22.7	3.63	1.03	1.4	12.0
P-47	21.7	3.59	.57	1.5	12.0
P-48	20.6	3.27	.72	1.5	12.0
P-43	23.0	3.49	.90	1.8	11.0
E-15	23.3	3.35	.95	.9	12.0
Pima S-5	22.9	3.51	.82	.8	12.0
P-44	21.7	3.72	.92	2.2	11.5
P-45	21.4	3.44	1.07	1.8	12.0
E-14	23.0	3.41	1.04	1.6	12.0
P-46	21.4	3.41	.99	1.5	12.0
P-42	21.5	3.45	.76	2.1	12.0

Variety	Seed volume (mm^3)	Seed surface area (mm^2)	Seed density (g/cm^3)	Floaters (percent)	Acid-delinted-seed index
P-49	141.5	142.2	0.922	2.3	13.0
P-34	144.4	144.4	.931	2.0	13.4
P-50	136.2	139.0	.941	1.8	12.8
E-16	131.9	136.0	.952	3.8	12.5
P-47	133.7	137.2	.938	3.3	12.6
P-48	144.7	144.6	.901	4.5	13.0
P-43	140.4	141.8	.938	1.1	13.2
E-15	136.0	138.8	.956	1.5	13.0
Pima S-5	137.4	139.7	.903	3.8	12.4
P-44	124.9	131.1	.929	4.8	11.6
P-45	132.1	136.1	.911	3.0	12.0
E-14	142.6	143.2	.941	3.0	13.4
P-46	141.8	142.7	.900	1.8	12.8
P-42	138.5	140.4	.892	7.0	12.3

COMBED-YARN TEST

Table 193. Combed-yarn test: Phoenix, Ariz.

Test	Variety				
	Pima S-5	P-34	P-42	P-43	P-44
Classer's designation:					
Grade	4	6	6	5	7
Staple: 32's inch	48	48	48	48	48
Yarn tenacity, cN/tex:					
11.8-tex, combed	172	181	174	172	172
7.4-tex, combed	146	154	146	139	146
Yarn appearance index ...	125	125	115	130	120
Yarn imperfections:					
11.8-tex, combed.....	50	70	74	64	76
7.4-tex, combed.....	158	106	134	102	136
Waste, percent:					
Picker and card	10.3	12.8	11.1	9.7	14.6
Comber	15.4	15.3	15.5	16.6	17.0

	P-45	P-46	P-47	P-48	P-49
Classer's designation:					
Grade	6	7	8	7	7
Staple: 32's inch	48	50	50	48	48
Yarn tenacity, cN/tex:					
11.8-tex, combed	188	188	183	188	169
7.4-tex, combed	161	161	154	158	146
Yarn appearance index ...	120	120	125	125	110
Yarn imperfections:					
11.8-tex, combed.....	30	62	32	60	100
7.4-tex, combed.....	112	124	128	124	234
Waste, percent:					
Picker and card	11.4	13.0	16.2	11.6	13.3
Comber	14.9	15.1	16.9	15.0	17.7

	P-50	E-14	E-15	E-16
Classer's designation:				
Grade	10	8	7	7
Staple: 32's inch	48	48	48	48
Yarn tenacity, cN/tex:				
11.8-tex, combed	179	164	176	188
7.4-tex, combed	154	142	150	165
Yarn appearance index ...	120	105	115	100
Yarn imperfections:				
11.8-tex, combed.....	62	96	162	88
7.4-tex, combed.....	94	314	238	278
Waste, percent:				
Picker and card	18.4	15.4	13.0	13.4
Comber	17.5	17.9	17.8	17.3

Table 194. Combed-yarn test: Safford, Ariz.

Test	Variety				
	Pima S-5	P-34	P-42	P-43	P-44
Classer's designation:					
Grade	5	5	6	4	5
Staple: 32's inch	48	48	48	48	48
Yarn tenacity, cN/tex:					
11.8-tex, combed	167	172	176	164	162
7.4-tex, combed	142	150	146	136	139
Yarn appearance index	120	130	120	125	125
Yarn imperfections:					
11.8-tex, combed	32	32	48	24	46
7.4-tex, combed	90	88	110	70	140
Waste, percent:					
Picker and card	9.8	10.8	11.1	9.3	11.7
Comber	14.3	13.0	14.6	14.3	15.9

	P-45	P-46	P-47	P-48	P-49
Classer's designation:					
Grade	6	5	7	5	4
Staple: 32's inch	48	48	48	48	48
Yarn tenacity, cN/tex:					
11.8-tex, combed	183	179	176	181	167
7.4-tex, combed	154	154	150	154	142
Yarn appearance index	125	115	120	120	125
Yarn imperfections:					
11.8-tex, combed	42	56	30	72	48
7.4-tex, combed	110	124	68	140	106
Waste, percent:					
Picker and card	11.8	11.6	14.5	10.0	10.2
Comber	14.7	15.1	13.8	15.0	14.8

	P-50	E-14	E-15	E-16
Classer's designation:				
Grade	6	5	5	5
Staple: 32's inch	48	48	46	48
Yarn tenacity, cN/tex:				
11.8-tex, combed	179	167	179	183
7.4-tex, combed	154	135	146	158
Yarn appearance index	115	125	105	115
Yarn imperfections:				
11.8-tex, combed	18	36	64	108
7.4-tex, combed	84	112	176	222
Waste, percent:				
Picker and card	14.2	11.4	10.4	10.6
Comber	15.0	14.9	14.8	16.6

Table 195. Combed-yarn test: El Paso, Tex.

Test	Variety				
	Pima S-5	P-34	P-42	P-43	P-44
Classer's designation:					
Grade	7	6	7	7	7
Staple: 32's inch	48	46	48	46	46
Yarn tenacity, cN/tex:					
11.8-tex, combed	174	169	172	162	169
7.4-tex, combed	146	146	142	139	135
Yarn appearance index ...	120	125	110	120	120
Yarn imperfections:					
11.8-tex, combed.....	24	30	64	40	38
7.4-tex, combed.....	88	78	174	60	92
Waste, percent:					
Picker and card	12.8	11.3	14.5	11.4	15.0
Comber	14.9	14.2	15.4	14.6	15.1

	P-45	P-46	P-47	P-48	P-49
Classer's designation:					
Grade	7	7	7	7	6
Staple: 32's inch	48	48	48	48	48
Yarn tenacity, cN/tex:					
11.8-tex, combed	181	179	172	176	167
7.4-tex, combed	150	154	142	150	135
Yarn appearance index ...	115	120	120	115	125
Yarn imperfections:					
11.8-tex, combed.....	50	34	40	38	28
7.4-tex, combed.....	128	100	64	98	106
Waste, percent:					
Picker and card	14.2	13.7	14.0	12.4	12.1
Comber	15.0	15.0	14.6	13.4	13.6

	P-50	E-14	E-15	E-16
Classer's designation:				
Grade	10	7	7	7
Staple: 32's inch	48	48	48	48
Yarn tenacity, cN/tex:				
11.8-tex, combed	172	162	179	181
7.4-tex, combed	146	131	150	154
Yarn appearance index ...	115	115	115	115
Yarn imperfections:				
11.8-tex, combed.....	54	76	44	46
7.4-tex, combed.....	102	126	136	150
Waste, percent:				
Picker and card	16.4	12.8	14.1	13.9
Comber	14.7	15.1	16.0	16.0

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(As of January 1981)

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C. W. Manning, Stoneville Pedigreed Seed Co., Stoneville, Miss.
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J. R. Smith, National Cotton Council of America, Memphis, Tenn.
L. O. Warren, Arkansas Agricultural Experiment Station, Fayetteville, Ark.
H. W. Webb, Coker's Pedigreed Seed Co., Hartsville, S.C.

NATIONAL COTTON VARIETY TESTING COMMITTEE

(As of January 1981)

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H. B. Cooper, Jr., California Planting Cotton Seed Distributors, Shafter, Calif.
E. C. Ewing, Jr., Delta and Pine Land Co., Scott, Miss. (secretary)
C. V. Feaster, U.S. Department of Agriculture, Cotton Research Center, Phoenix, Ariz.
J. R. Gannaway, Texas Agricultural Experiment Station, Lubbock, Tex.
D. C. Hess, ACCO Seed, Plainview, Tex.
P. E. Hoskinson, West Tennessee Agricultural Experiment Station, Jackson, Tenn.
N. R. Malm, New Mexico Agricultural Experiment Station, Las Cruces, N. Mex.
C. W. Manning, Stoneville Pedigreed Seed Co., Stoneville, Miss.
D. Markarian, San Joaquin Valley Continuous Variety Testing Committee, Bakersfield, Calif.
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H. H. Ramey, Jr., U.S. Department of Agriculture, Knoxville, Tenn.
W. P. Sappenfield, University of Missouri, Delta Center, Portageville, Mo.
H. W. Webb, Coker's Pedigreed Seed Co., Hartsville, S.C.

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